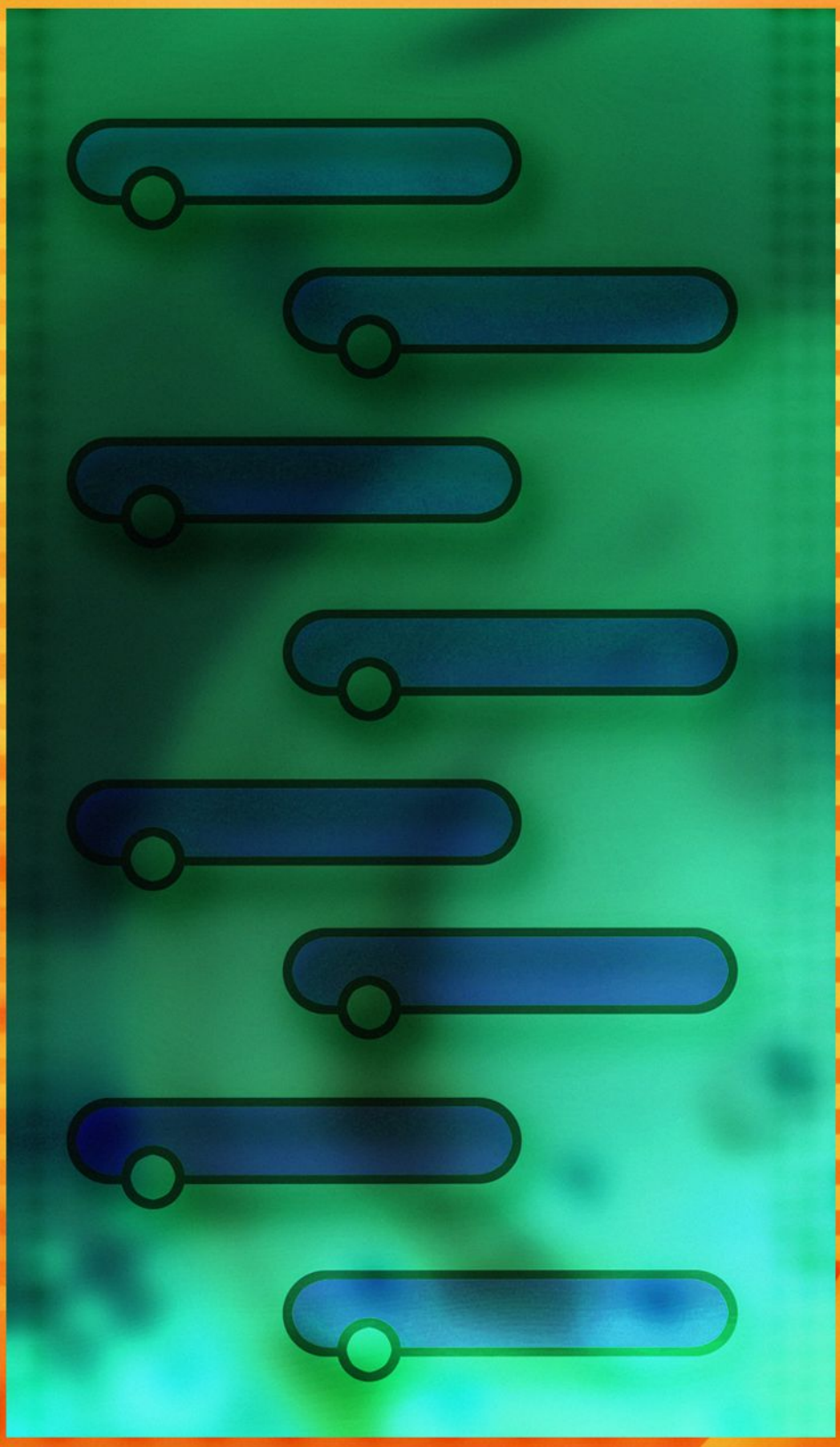
ProVIEW

Maintenance Management Software



Report Editor User's Manual

American Quality Systems

ProVIEW™ 4 Report Editor

User's Manual

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PROVIEW 4 REPORT EDITOR

User's Manual

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Chapter 1: Installing ProVIEW 4 Report Editor

You can use Report Editor on a single workstation, on a network, or a client/server environment, although installation will vary slightly for each of these options. This chapter will guide you through the installation process for each of these.

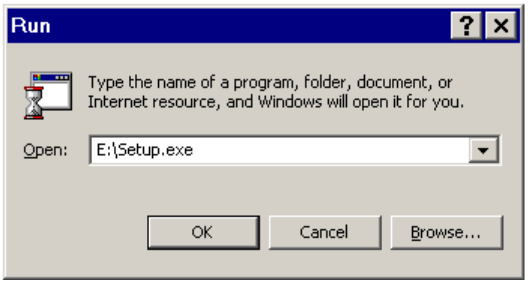
System Requirements

- Installed and working ProVIEW 4 Application
- Microsoft Windows 95SE, 98, NT, 2000, XP
- Hard disk with 40 MB of free space for program files
- 128 MB RAM or more VGA or compatible display monitor
- Mouse or compatible pointing device
- Printer (if you want to print reports, ink jet, bubble jet, or laser printer is best)
- At least 500MHz Processor

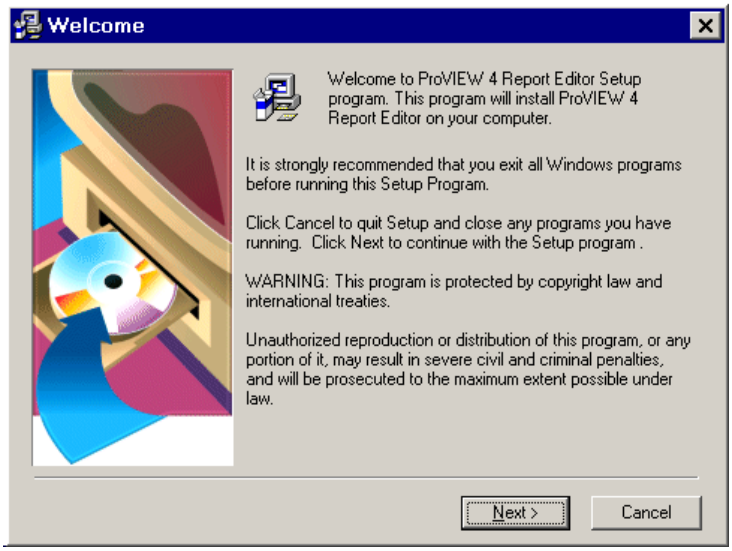
Installation

It is highly recommended that you close all applications first before installation. To begin, insert the CD into the drive and follow the steps below:

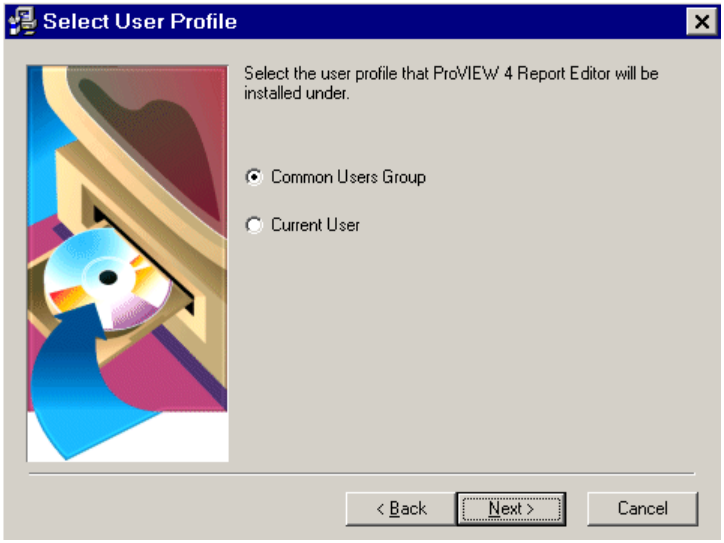
1 Click the Windows START button and select RUN. Then click on the BROWSE button to navigate to your CD-ROM, then select Setup.exe.



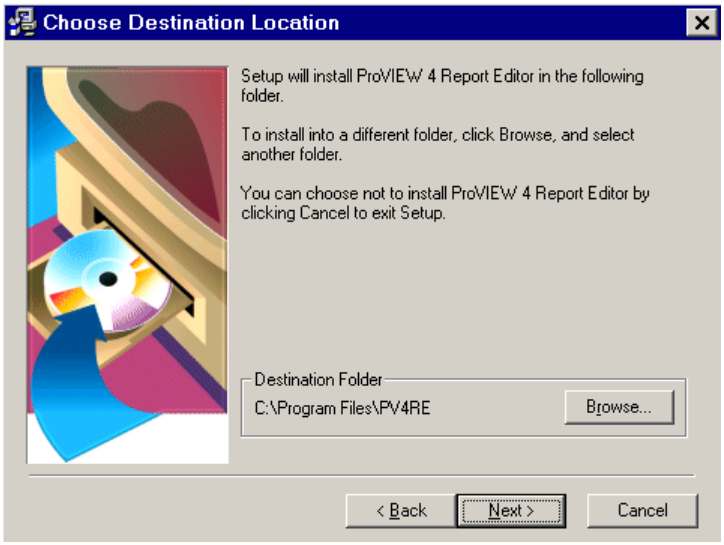
2 The Setup Wizard will appear to guide you through the rest of the process. Click NEXT> to proceed with installation.


Welcome
Welcome to ProVIEW 4 Report Editor Setup program. This program will install ProVIEW 4 Report Editor on your computer.
It is strongly recommended that you exit all Windows programs before running this Setup Program.
Click Cancel to quit Setup and close any programs you have running. Click Next to continue with the Setup program .
WARNING: This program is protected by copyright law and international treaties.
Unauthorized reproduction or distribution of this program, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under law.
Next >
Cancel

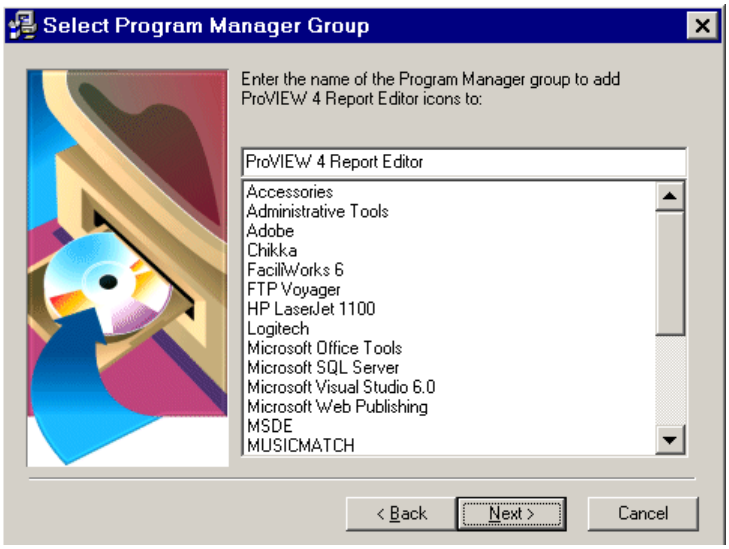
3 Define the Microsoft Windows User Profile Report Editor will be installed in.


Select User Profile
Select the user profile that ProVIEW 4 Report Editor will be installed under.
Common Users Group
Current User
< Back
Next >
Cancel

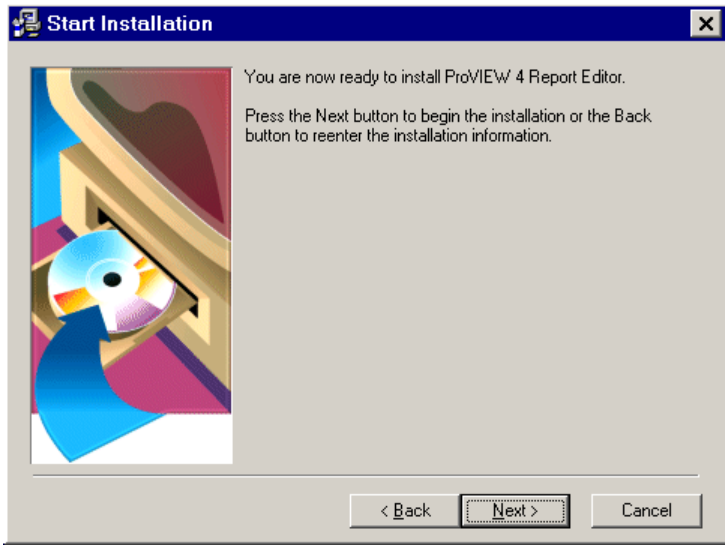
4 If you choose the default location, the Setup Wizard will install Report Editor in C:\PROGRAM FILES\PV4RE. However, you can specify a different location by clicking on the Browse button and indicating the destination folder. Click Next> to continue.


Choose Destination Location
Setup will install ProVIEW 4 Report Editor in the following folder.
To install into a different folder, click Browse, and select another folder.
You can choose not to install ProVIEW 4 Report Editor by clicking Cancel to exit Setup.
Destination Folder
C:\Program Files\PV4RE
Browse...
< Back
Next >
Cancel

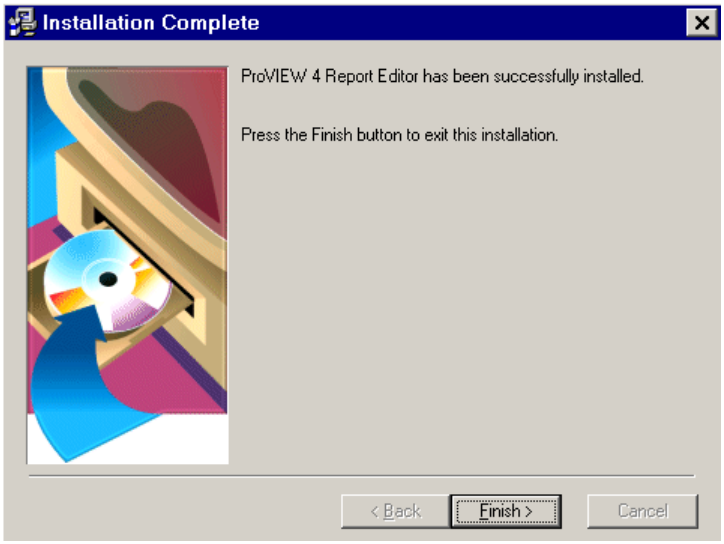
5 The Setup Wizard will then prompt you to specify the Program Manager group to which you want to add the Report Editor icons. It is recommended that you accept the default location ProVIEW 4 Report Editor. CLICK Next> to continue.



6 The Setup Wizard will prompt you that you are ready to install ProVIEW 4 Report Editor. Click Next> to proceed, or Cancel to abort the process.

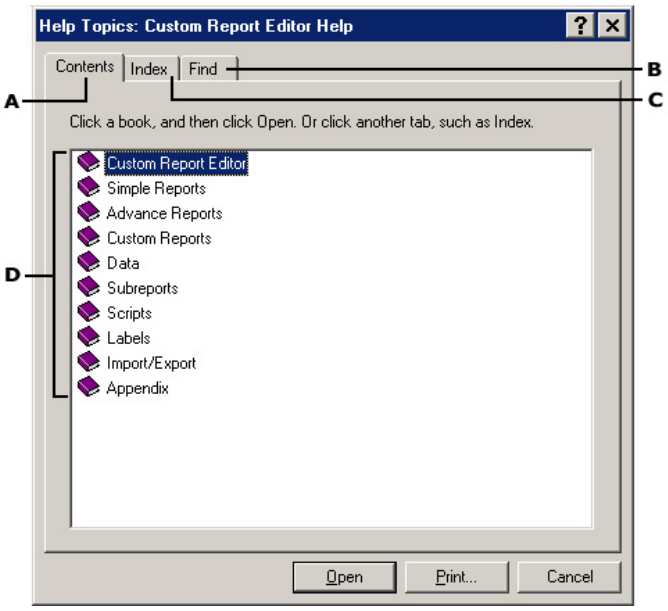

Start Installation
You are now ready to install ProVIEW 4 Report Editor.
Press the Next button to begin the installation or the Back button to reenter the installation information.
< Back
Next >
Cancel

7 Installation will begin. The SETUP WIZARD will inform you of successful installation. Click Finish> to exit.


Installation Complete
ProVIEW 4 Report Editor has been successfully installed.
Press the Finish button to exit this installation.
< Back
Finish >
Cancel

Chapter 2: Setting Program Conventions

ProVIEW 4 Report Editor Help



Report Editor Help window

A. Contents tab **B.** Find tab **C.** Index tab **D.** Help Topics listing

To access the Help menu, do any of the following:

- From the Main Menu, select Help.

- Press F1.

The Help window opens with the Contents tab. Click the tabs to switch among Contents, Index, and Find tabs.

Contents Tab

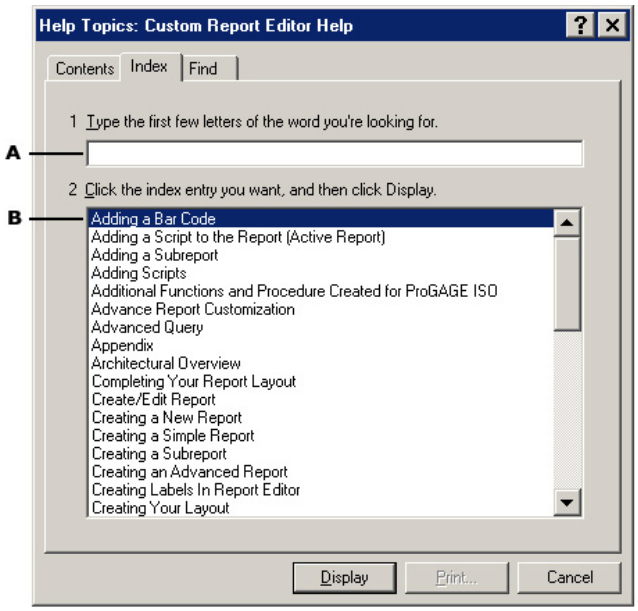
The Contents tab lists help topics by subject matter, similar to a table of contents in a book.

To expand or collapse each topic, do any of the following:

- Double-click on a topic.
- Press the OPEN (or CLOSE) button.

Index Tab

Choose the Index tab to find Help topics in a linked, alphabetical list of terms for various features, functions and concepts.



Index tab

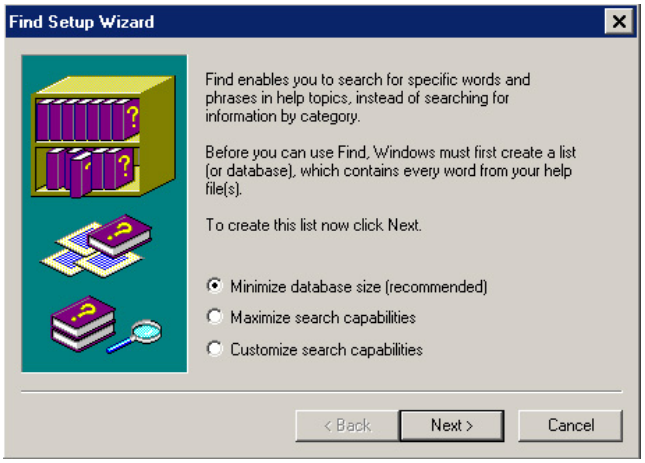
A. Search field **B.** Index Entry listing

To browse the listing, do any of the following:

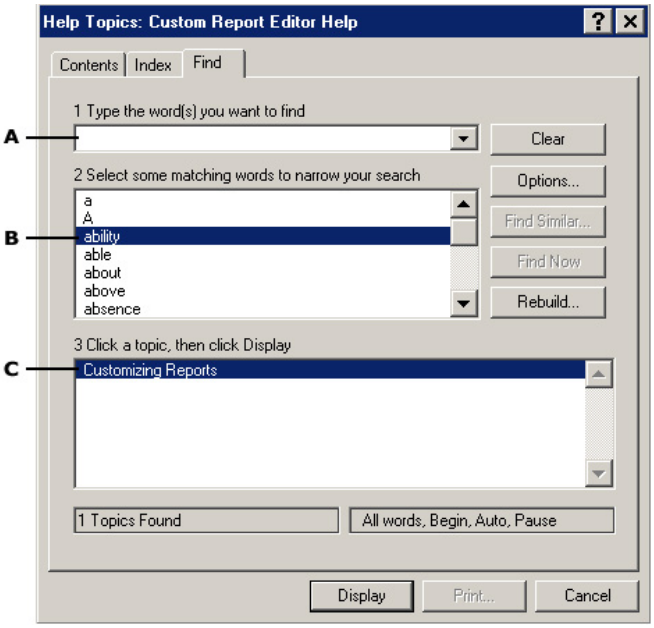
- Type in the first few letters of the topic you want to view in the blank field in the upper portion of the screen.
- Scroll and highlight the topic you want from the list and click DISPLAY.

Find Tab

You can also use the Find tab to search for a specific topic in help. Before you can use the Find tab, you need to create a database first. Simply follow the Setup Wizard to construct your Find database.


Find Setup Wizard
Find enables you to search for specific words and phrases in help topics, instead of searching for information by category.
Before you can use Find, Windows must first create a list (or database), which contains every word from your help file(s).
To create this list now click Next.
Minimize database size (recommended)
Maximize search capabilities
Customize search capabilities
< Back
Next >
Cancel

Once you have established your database, type in the search word in the field and a list of all of all the topics containing the search word will be displayed, appearing in the order these are listed in the Contents tab. Make your selection from the list and click DISPLAY.



Find tab

A. Search field for keywords **B.** Search for matching words box **C.** Topic listing box

Printing Help Topics

You can print individual topics from the Help documentation. However, you can only print one topic at a time.

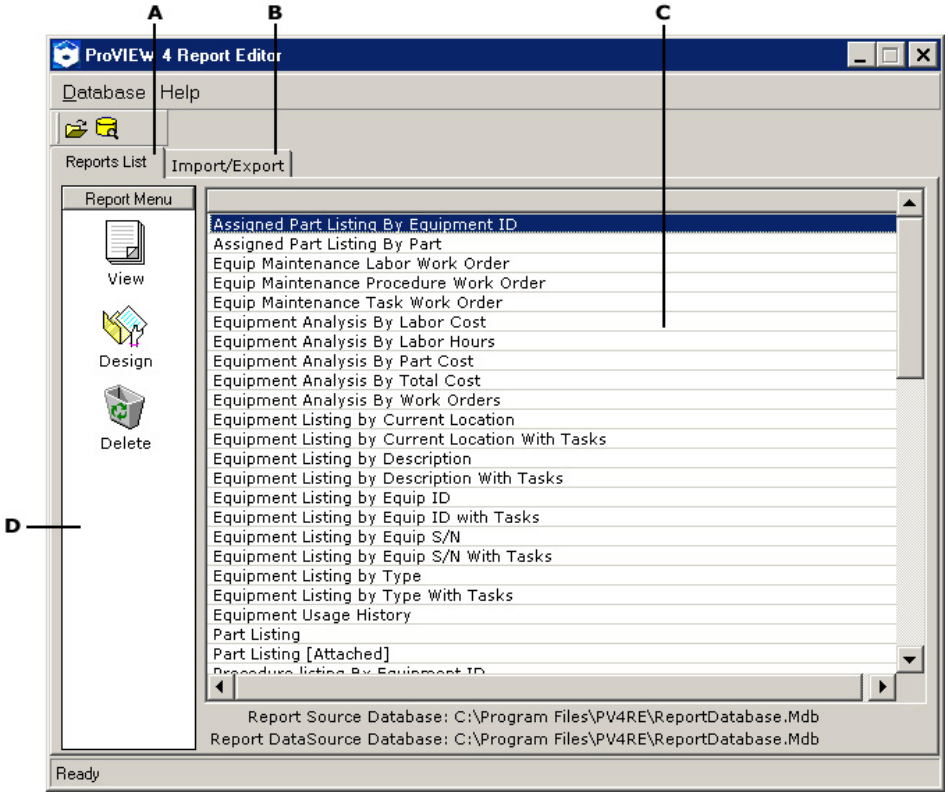
To print a Help topic:

1 Open the Help topic you want to print.

2 Click PRINT on the Help toolbar.

About Report Editor

The Report Editor window is divided into two tab folders: Reports List and Import/Export. Reports List enumerates the reports templates you can use, while Import/Export allows you to transfer data to and from compatible databases.



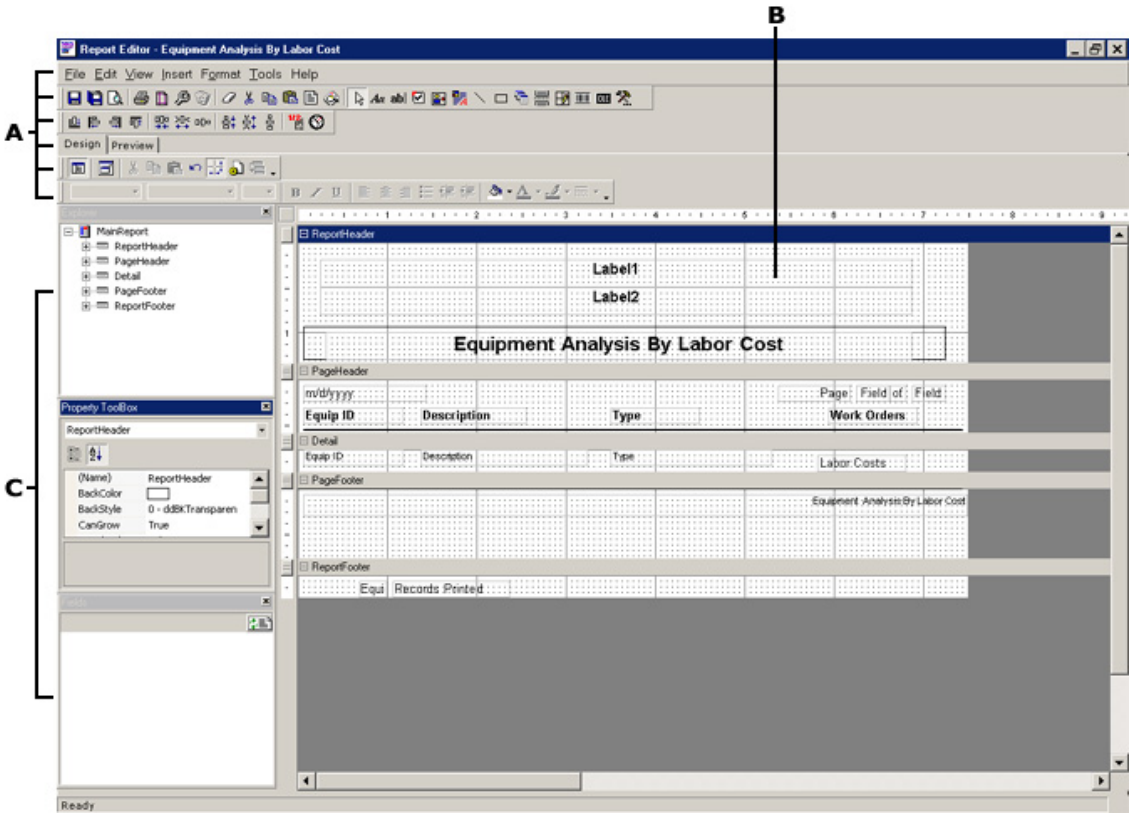
Report Editor screen

A. Reports List tab **B.** Import/Export tab **C.** Records Listing pane **D.** Report Menu

Records Listing Pane

The Records Listing pane in the Report Editor screen lists all the available report templates. You can choose to view, design or delete these templates by selecting the appropriate button from the Report Menu

Report Editor Screen



Report Editor screen

A. Button/Menu bars; Design and Preview tabs **B.** Information Boxes (Explorer, Property Toolbox and Fields) **C.** Report canvas

The Report Editor screen is divided into three sections:

Control	Description
Report Canvas	Area wherein you create, modify, and work with reports, report objects, and report elements.
Button/Menu Bar	The commands and actions for working with and manipulating report information.
Information Boxes	Provides quick access to key report elements such as Fields and Properties.

Report Canvas

The Report Canvas is also divided into three major sections:

Control	Description
Header	Contains additional report information such as report title, date, etc.
Detail	Contains the body of the report.
Footer	Contains supplemental report information such as page numbers.

The two tabs DESIGN and PREVIEW lets you view the report in *Design* or *Preview* mode.

Button/Menu Bar

The Button/Menu bar encompasses all ProVIEW 4 Report Editor features and functions.

Menu

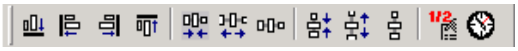
Control	Description
File	Create New, Opening Existing, Saving, and Printing.
Edit	Undo, Delete Object, Cut, Copy, Paste, and Editing a Subreport.
Insert	Select which Information Boxes are visible.
View	Insert Page Numbers, Date/Time, Headers/Footers, and Delete Sections.
Format	Aligning, Sizing, Spacing, and Position (back or forward) of canvas elements.
Tools	Setting SQL Source, Editing Subreports, and Restore Report Option.
Help	Accessing Help Content.

Button Bar

There are three primary button bars:

1 Main Button Bar—Contains most of the core file and element functions. (i.e., adding new elements to the canvas, printing and copying reports, etc.). For a complete list of buttons, see *Appendix A: Object/Control Properties Definitions* on page 81.

2 Format Button Bar—Contains all of the tools to align and format objects on the canvas. For a complete list of buttons, see *Appendix A: Object/Control Properties Definitions* on page 81.



3 Designer Button Bar—Contains all of the tools to manipulate objects on the canvas (such as setting label text type, etc.). For a complete list of buttons, see *Appendix A: Object/Control Properties Definitions* on page 81.

Information Boxes

There are three information boxes that provide quick access to critical report elements:

1 EXPLORER—Contains a tree diagram of the different parts of the Report Editor canvas. Clicking on the "+" or "-" before each component will expand or collapse the node. Meanwhile, selecting any item will display its properties in the PROPERTY TOOLBOX.

2 FIELDS—Contains all available fields connected to the database. You can select any field and drag it to the designer canvas to create a field object.

3 PROPERTY TOOLBOX—Contains the properties of the object that has been selected in the EXPLORER frame and/or on the designer canvas. The properties displayed vary depending

on the object selected. You can organize the properties alphabetically or by categories of properties:

Control	Description
	An alphabetical list of all the properties
	Categories of properties that include: ▪ Appearance ▪ Behavior ▪ Data ▪ Font ▪ Miscellaneous ▪ Position

Context-Sensitive Menus

The Report Editor utility provides a context-sensitive menu for quick access to key functionality when working with objects on the canvas. Context-sensitive menus are accessible by either right-clicking on a report section or on an object. Menu options include:

1 Insert
- Group Header/Footer
- Page Header/Footer
- Report Header/Footer

2 Delete

3 Cut

4 Copy

5 Paste

6 Bring to Front

7 Send to Back

8 Align
- Left—Aligns objects vertically against the left side. This is only available if you have selected multiple objects (holding the *CTRL* button while clicking) and then accessed the context-sensitive menu.
- Center—Aligns objects vertically in the center. This is only available if you have selected multiple objects (holding the *CTRL* button while clicking) and then accessed the context-sensitive menu.
- Right—Aligns objects vertically against the right side. This is only available if you have selected multiple objects (holding the *CTRL* button while clicking) and then accessed the context-sensitive menu.
- Top—Aligns objects horizontally against the top. This is only available if you have selected multiple objects (holding the *CTRL* button while clicking) and then accessed the context-sensitive menu.

- Middle—Aligns objects horizontally in the middle. This is only available if you have selected multiple objects (holding the *CTRL* button while clicking) and then accessed the context-sensitive menu.
- Bottom—Aligns objects horizontally against the bottom. This is only available if you have selected multiple objects (holding the *CTRL* button while clicking) and then accessed the context-sensitive menu.
- To Grid—Aligns the object to the nearest grid markers
- Center in Selection—Centers the object in the middle of the section

9 Size

- Make same width—Makes all the objects selected the same size. This is only available if you have selected multiple objects (holding the *CTRL* button while clicking) and then accessed the context-sensitive menu.
- Make same height—Makes all of the objects selected the same height. This is only available if you have selected multiple objects (holding the *CTRL* button while clicking) and then accessed the context-sensitive menu.
- Make same size—Makes all of the objects selected the same width and height. This is only available if you have selected multiple objects (holding the *CTRL* button while clicking) and then accessed the context-sensitive menu.

10 Horizontal Spacing

- Increase—Increases the horizontal distance between the objects. This is only available if you have selected multiple objects (holding the *CTRL* button while clicking) and then accessed the context-sensitive menu.
- Decrease—Decreases the horizontal distance between the objects. This is only available if you have selected multiple objects (holding the *CTRL* button while clicking) and then accessed the context-sensitive menu.
- Make Equal—Makes the horizontal distance between the objects equal. This is only available if you have selected multiple objects (holding the *CTRL* button while clicking) and then accessed the context-sensitive menu.

11 Vertical Spacing

- Increase—Increases the vertical distance between the objects. This is only available if you have selected multiple objects (holding the *CTRL* button while clicking) and then accessed the context-sensitive menu.
- Decrease—Decreases the vertical distance between the objects. This is only available if you have selected multiple objects (holding the *CTRL* button while clicking) and then accessed the context-sensitive menu.
- Make Equal—Makes the vertical distance between the objects equal. This is only available if you have selected multiple objects (holding the *CTRL* button while clicking) and then accessed the context-sensitive menu.

12 Format Border—Brings up the FORMAT BORDER window.

Tabs

Above and to the left of the format button bar are two tabs that control which workspace you are in. To access a workspace, simply click on the tab.

Control	Description
Design	Displays your report in edit mode.
Preview	Displays your report in print-form. This is identical to: ▪ Clicking on the Print Preview button ▪ Selecting the Print Preview option from the File menu ▪ Pressing CTRL + P

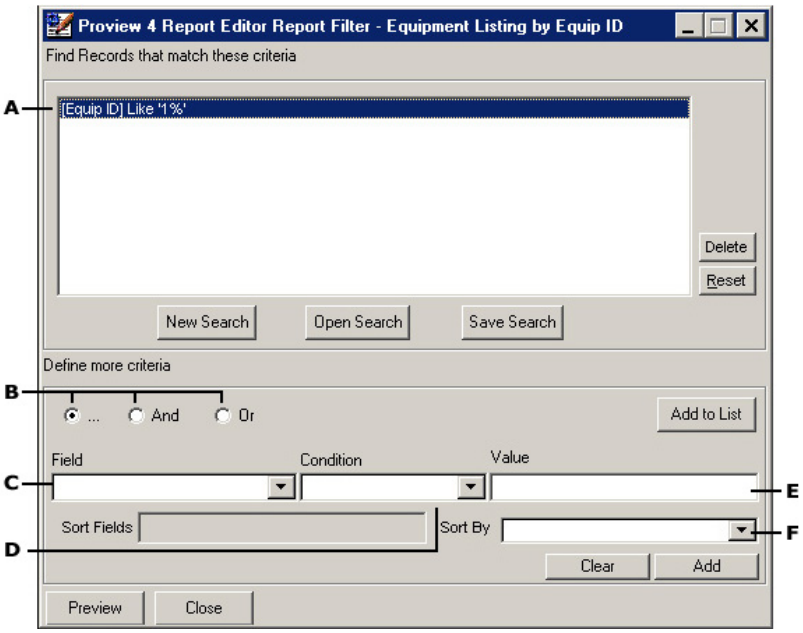
Keyboard Shortcuts

Report Editor includes several keyboard shortcuts to make accessing import functions quick and easy. Shortcuts include:

Control	Description
CTRL+O	Open an existing report.
CTRL+S	Save the current report.
CTRL+P	Print preview the current report.
CTRP+Z	Undo the last action.
CTRL+X	Cut the currently selected object from the canvas
CTRL+C	Copy the currently selected object on the canvas
CTRL+V	Paste whatever is in the Windows clipboard onto the canvas.

Search and Filter Option

This feature is used in filtering records using a specific string of characters. It allows you to search through a large number of records and easily access a specific record.



Report Editor Report Filter

A. Criteria **B.** Radiobuttons **C.** Field **D.** Condition **E.** Value **F.** Sort By field

Control	Description
Criteria	Displays a listing of the generated criteria. A *Criteria* may be a single criterion or a combination of criterions. Criterions can be combined by using the *OR* button. Just make sure you click on the *OR* button before adding another criterion be.
New Search	Click to create a new Filter name.
Open Search	Opens a list of previously saved search criteria.
Save Search	Saves the newly created or modified criteria.
Delete	Deletes the current filter.
Reset	Removes all criteria from the Filter criteria list.
..., And, Or	When defining criteria, use these buttons to connect criterion. Use **And** if both premises need to be true; **Or** if only one premise must be true.
Add to List	Adds your defined criterion to the criteria list.
Field	This drop down list enumerates all available fields you can search and include in the selected report. This is also the field name used for the search criteria. Field names appear as column headings in the printed report.
Condition	List of available field operators that you can use in formulating search criteria. The following describes each operator: **contains** – the value listed is a subset or is part of the search field **begins with** - the search field begins with the value listed **ends with** - the search field ends with the value listed **is between inclusive** – the value listed is within the contents of the search field from the first to the last entries **is between exclusive** – the value listed is between the first and the last entry of the search field **not like** - the value listed is not a subset of or is not part of the search field **=** - the search field matches the value listed exactly **<>** - the search field is not equal to the value listed **<** - the search field is less than the value listed **>** - the search field is greater than the value listed **<=** - the search field is less than or equal to the value listed **>=** - the search field is greater than or equal to the value listed **Is** & **Is Not** – these work only in conjunction with the "Null" value (empty field)

Control	Description
Value	Enter a value to be used in your search. A *Value* may be a string of alphanumeric characters, or a date. The type of entry will depend on the selected Field. For example, the *Value* entry field will not permit an alphabet string value if the selected field is a numeric field. Also, dates are automatically checked as to the format accepted by the application. Wildcards are also accepted. Supported wildcard characters are: **Asterisk (*)** - represents two or more alphabets or numeric characters **Question Mark (?)** – represents a single alphabet or numeric character **Number Sign (#)** – represents a single numeric character (for date fields however, use asterisk instead) **Square Brackets ([])** – matches any single character within the brackets. If characters within the brackets are preceded by an exclamation point (!), it represents a single alphabet character not included in the bracket (i.e., *b[!ae]ll* finds *bill* and *bull*, but not *ball* and *bell*). You may also indicate a range of characters using a hyphen (-), thus *b[a-c]d* matches *bad*, *bbd*, and *bcd*.
Sort Fields	Displays a list of field/s which will serve as basi(e)s in sorting data that will be included in the report. If more than one field is chosen, the selected fields will be registered from the first chosen to the last, separated by comma.
Sort By	This field list enumerates the available fields that can be used in sorting data results. Records are ordered with this field as reference.
Clear	Resets *Sort Fields.*
Add	Adds value of *Sort By* field to the *Sort Fields* entry.
Preview	Previews the report. From within the preview, you can select whether you print or email your report.
Close	Closes the Report Filter window.
Quick Filter	Brings you back to the Quick Filter.

Chapter 3: Opening Databases

Report Editor uses two databases: a Reports database, which contains reports templates; and the Data Source database, which stores the data reflected in the reports templates. You need to specify and map these before you can run Report Editor.

Reports Database

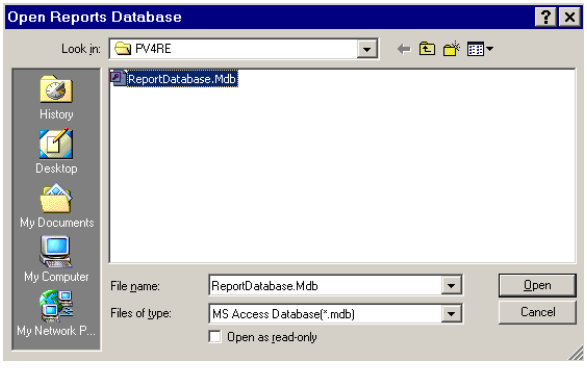
The Reports database provides you with a selection of reports you can customize according to your requirements.

To open a Reports database, do any of the following:

- Access DATABASE > OPEN REPORTS DATABASE from the MAIN MENU.

- Press the shortcut key CTRL+O.
- Click on the OPEN REPORT DEFINITION button from the main floating toolbar.

The Open Reports Database dialogue will then appear. Locate and specify the source database ReportDatabase.Mdb and click OPEN.



Data Source Database

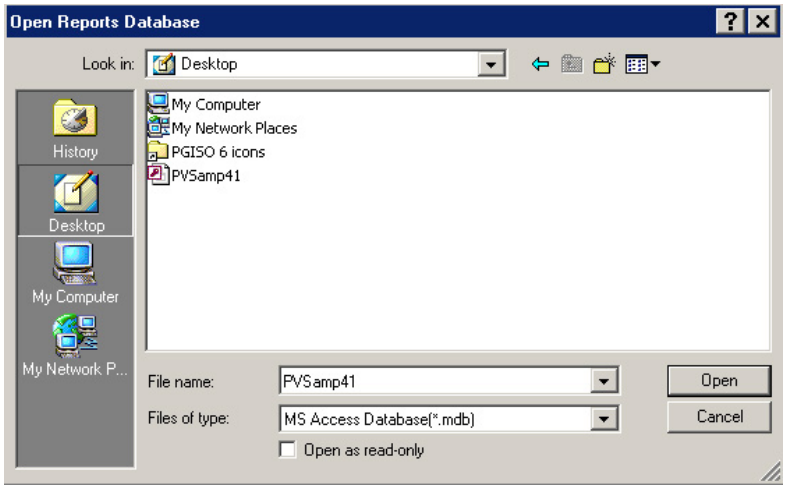
Data you want to use in your reports are stored in the Data Source database.

To open Data Source database, do any of the following:

- Access DATABASE > SETUP REPORT DATASOURCE from the MAIN MENU.

- Click on the Setup Report Datasource button from the main floating toolbar.

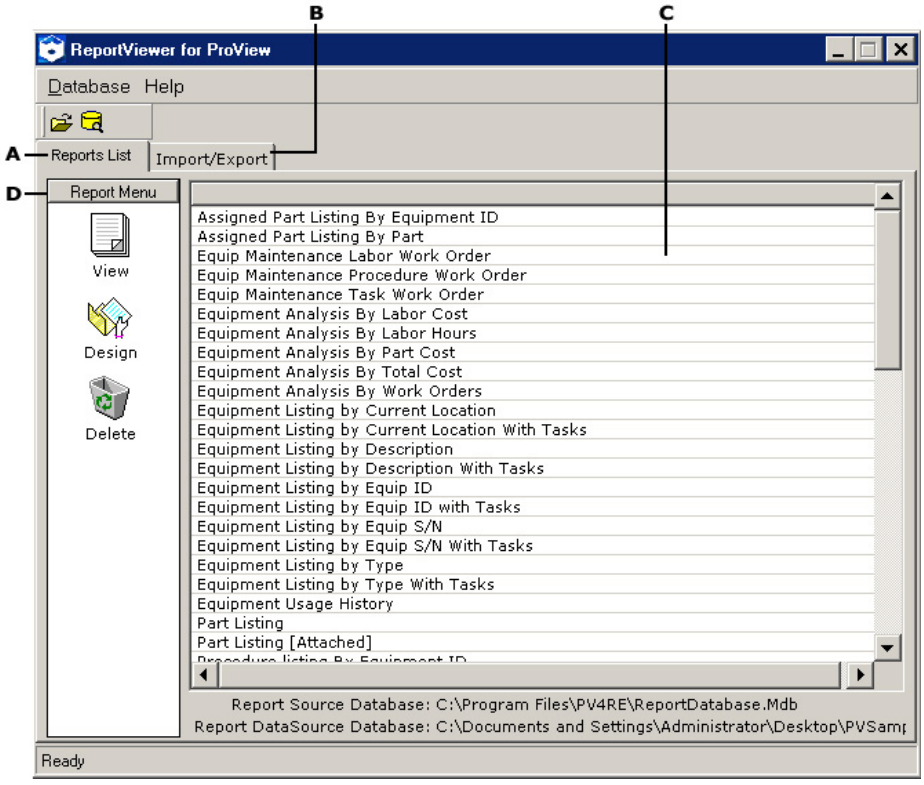
- The Open Reports Database screen will then appear. Locate and specify the Data Source database and press OPEN. By default, ProVIEW 4 databases are saved in the ProView 4 program files folder.



Chapter 4: Modifying Reports

ProVIEW 4 Report Editor includes a selection of reports you can use. It also allows you to view, edit and print pre-formatted reports using data you have entered into the program. You can also delete reports that are no longer in use.

The Report Editor design environment describes how to add and modify controls in your report. It includes detailed descriptions of the Report Editor user interface elements including menus, toolbar items, and preference settings. In addition, you will learn some basic operations such as selecting and moving, formatting and aligning controls in your report.



Report Editor window

A. Reports List tab **B.** Import/Export tab **C.** Report Menu **D.** Records Listing pane

To edit a report:

1 Open the Report Editor screen by doing any of the following:

- Highlight a report from the list and click DESIGN from the REPORT MENU.
- Right-click on the report and choose Edit from the context menu.

2 The report you selected will then be made available in the *Design* mode of the Report Editor.

The Report Canvas

The Report Designer canvas is divided into a number of critical information areas:

Control	Description
Report Header (optional)	This section appears only once in a report – on the very first page. This section is normally used for company headers and report titles.
Page Header	The section appears in each and every page of your report document. The usual contents of this section would include the heading for each field of your report. It is a good idea to include the report date and sometimes even page number in this section so you can identify which pages go together as well as figure out the arrangement of the pages.
Group Header (optional)	If the data can be organized based in a common field, create a group header to hold the values of the common field. This is called data grouping. For example, creating a report of gage calibration schedules, you can group the report on gage IDs. For more details, see *Grouping Your Data* on page 31.
Detail	This section includes data fields – the detail of your report. If you have subreports, these are usually included in this section.
Subreports (optional)	Subreports can be contained within the Detail section or any of the group sections. Subreports are linked using a common field—if the field appears in the details section, subreports can be included in the same section, or any other section where the common field may be.
Report Footer	This section appears only on the last page of your report, after the last record. The example above also includes the total number of records printed for the report.
Page Footer	Page Footers come hand-in-hand with Page Headers, and appear at the bottom of every report page. The page footer normally includes page numbers. It may also contain sub-totals of the value fields in your report.
Report Fields	If you have established a database connection, all available fields will appear in this frame. You can then select any field and drag it to the designer canvas on the right.
Property Toolbox (optional)	This frame lists the properties of the object/control currently selected in the Explorer frame. The properties displayed vary depending on the object selected. See *Appendix A: Object/Control Properties Definitions,* beginning on page 81, for a detailed discussion of the different properties of controls/objects of Report Editor.

Note: For more information, see *About Report Editor* beginning on page 8.

The Report Data Source

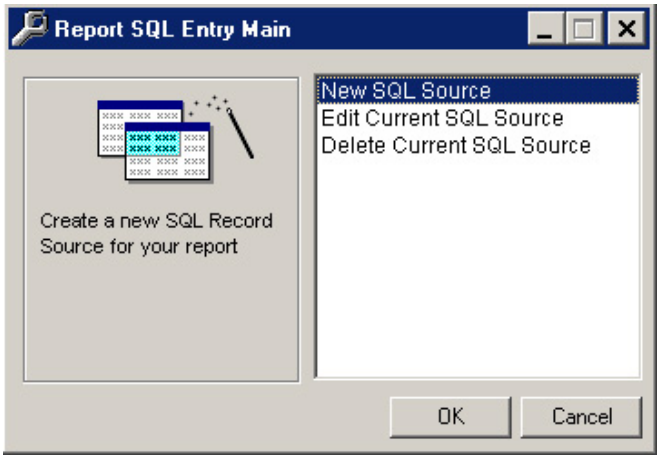
Before you can design and build your report, you need to set the data source. The fields in the data source will define the fields that you can put into your report.

To open a Data Source:

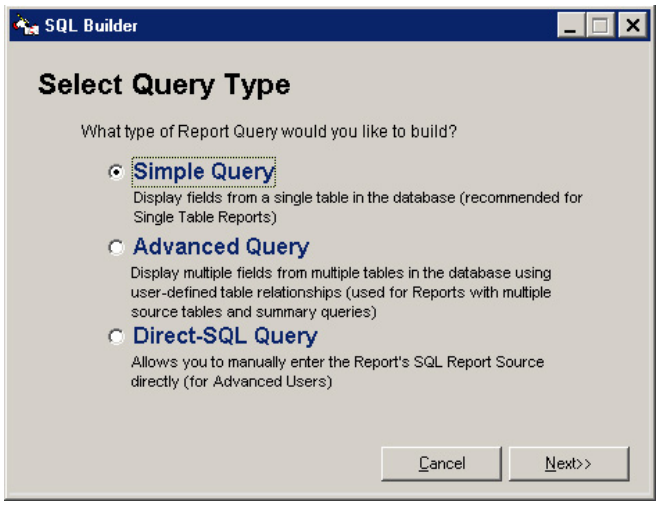
1 Open your data source by doing any of the following:

- Select SET SQL SOURCE from the TOOLS menu.
- Activate the SET SQL SOURCE icon .

Both methods will open the SQL SOURCE WIZARD.



2 Select *New SQL Source* and then click on the *OK* button to continue. The *Select Query Type* window will then appear.


SQL Builder
Select Query Type
What type of Report Query would you like to build?
Simple Query
Display fields from a single table in the database (recommended for Single Table Reports)
Advanced Query
Display multiple fields from multiple tables in the database using user-defined table relationships (used for Reports with multiple source tables and summary queries)
Direct-SQL Query
Allows you to manually enter the Report's SQL Report Source directly (for Advanced Users)
Cancel
Next>>

You can select one from three types of queries:

1 *SIMPLE QUERY* — Recommended for reports that will use data from a single table.

2 *ADVANCED QUERY* — Recommended for reports that will use data from multiple tables.

3 *DIRECT-SQL QUERY* — Recommended for those who wish to enter their own SQL statement.

The first two options use a query wizard to guide you through the process. For the third type, knowledge of how to create SQL commands and corresponding syntax is necessary. Depending on the type of Data Source you want to create, the report will retrieve data from one or from multiple tables. Select the QUERY TYPE to use by selecting the corresponding radiobutton and clicking *Next>>* to continue.

Simple Query

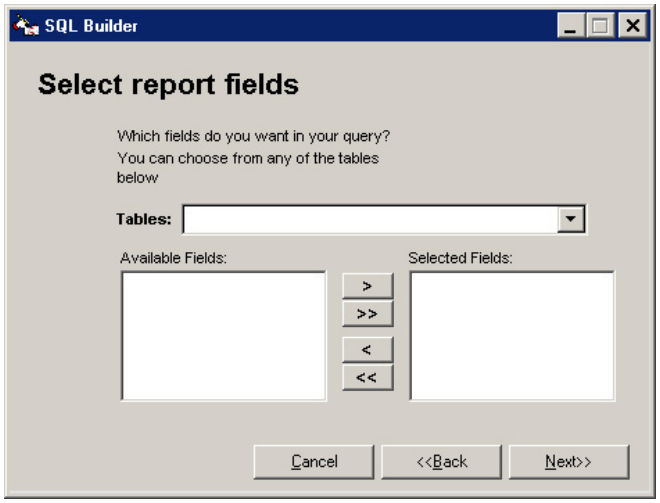
If you only have one data source—that is, only one table to base your report on—then the Simple Query is the best choice.

A Simple Query is based on the following:

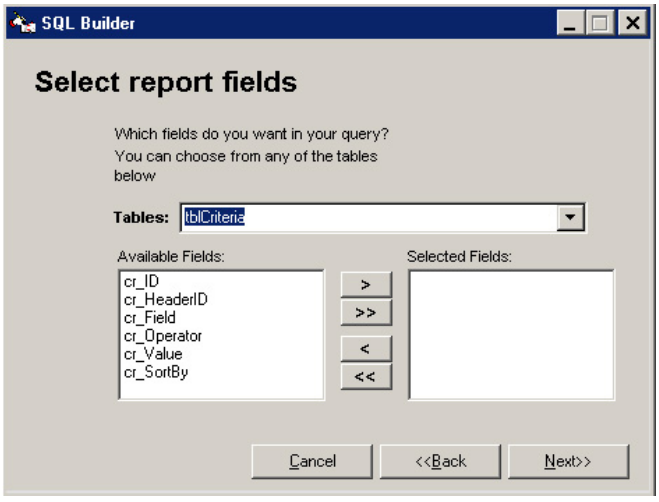
Control	Description
Tables	The options on the dropdown menu are automatically determined and are the names of the tables in your data source. Select the table that you want to use (in this case, *Authorized_Persons*).
Available Fields	Once you have selected a table, this table will automatically populate with the fields from that table.

Using Simple Query:

1 Activate the Simple Query radiobutton and click NEXT>>. The *Select Report Fields* window will appear.



2 Click on the drop-down button to the right of the *Tables* field, and make your selection from the list of available tables in your database.

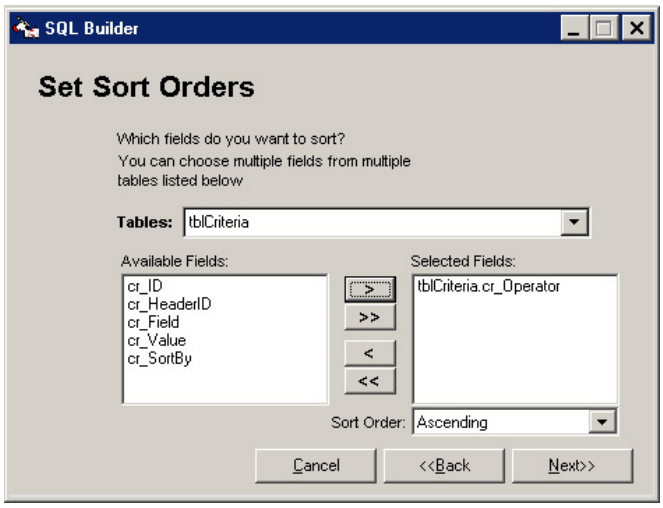


3 Once you have made your selection, click the > button and the selected fields will then be displayed in the *Selected Fields* box. You can also move all of the fields by clicking the *>>* button.

To remove field/s from the *Selected Fields* box, select field/s and click the appropriate buttons (< button to remove a single field; << button to remove all of the fields). The removed field will be displayed in the *Available Fields* box.

4 Click NEXT>> when you're done and the *Sort Window* appears.

5 In this screen, select the order of the fields you have chosen in the same manner you selected these fields. You can also choose not to sort the fields and present them as they appear in the original records.



Select from the *Set Order* drop-down menu the order by which the selected fields will be sorted. *Ascending,* to arrange starting from *A* to *Z*; *Descending*, from *Z* to *A*. The default option is *Ascending*.

6 Click the *Next>>* button once the desired sort order is set. This will bring up the *Finish* window.

Note: Setting a sort order is not required to conduct a *Simple Query*. If you add fields to the *Select Fields* box but do not select a *Sort Order*, the system will sort the selected field/s following the default (Ascending) option.

7 The *Finish* window displays the completed SQL Statement based from the data table, fields, and sort order that you've specified. This window allows you to modify the SQL Statement by making changes directly in the box. When you are satisfied with the SQL Statement, click the *Finish* button to close the SIMPLE QUERY WIZARD and return to the report canvas.

Note: You can change the SQL statement provided that you how how to build SQL statements. Otherwise, you will get an error message so it's better not to edit this.

When you click the *Finish* button, you will be returned to the main canvas where you can now access the fields you included in your query into your report. Each of the fields that you included in your query is available from the FIELDS information box. Simply click on a field and drag it onto your canvas to add it to the report.

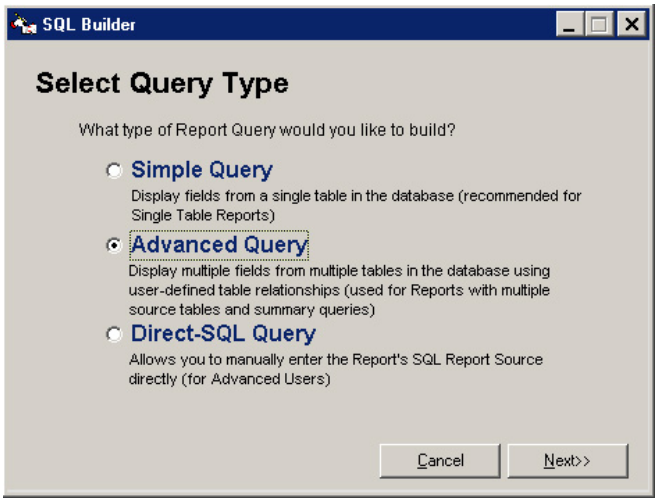
Advanced Query

This is suitable for reports that use multiple data tables. You will be able to use the fields from different tables that you select, which are connected by links that you will create or specify. However, it is crucial that you know the structure of your tables and

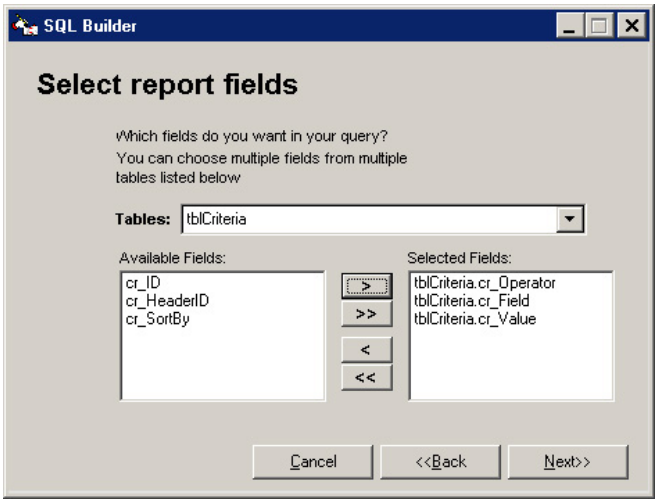
the types of the fields that are in these tables. This type of query also allows you to link two tables using a field similar to both tables. To create an advanced query, open the SQL Builder Window.

Using Advanced Query:

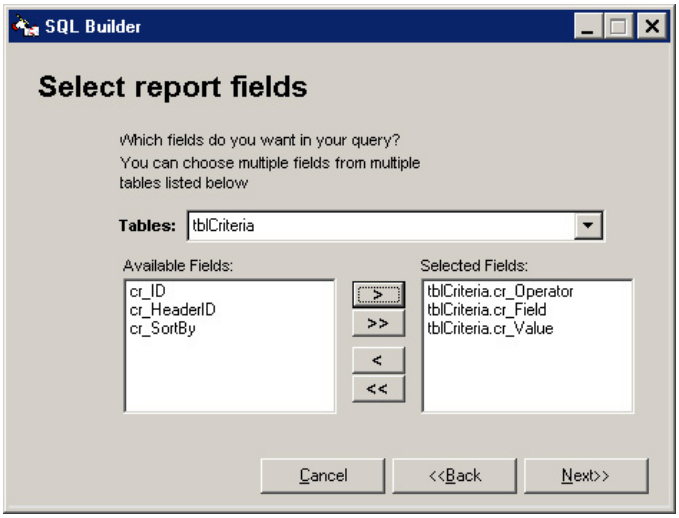
1 Activate the Advanced Query radiobutton and click NEXT>>.


SQL Builder
Select Query Type
What type of Report Query would you like to build?
Simple Query
Display fields from a single table in the database (recommended for Single Table Reports)
Advanced Query
Display multiple fields from multiple tables in the database using user-defined table relationships (used for Reports with multiple source tables and summary queries)
Direct-SQL Query
Allows you to manually enter the Report's SQL Report Source directly (for Advanced Users)
Cancel
Next>>

The *Select Report Fields* window will appear.



2 Select the tables and fields you want in the same way you'd choose these elements in a Simple Query. However, you are not limited to the fields of just one table. You can add as many fields as you want from different tables. Then, click NEXT>> to open the *Table Links* window.



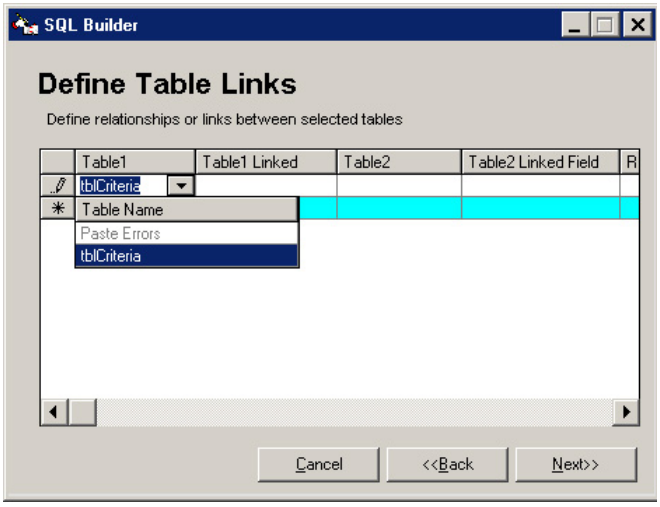
Note: In the field listing, the string of characters before the period indicates the table name, while the field name is displayed after the period.

Fields that you will use to link your tables do not have to be displayed in the Selected Fields list. It is recommended, though, that you choose a link field from the table whose records will all be included in the report. For example, you have a table of gage calibrations which does not include details of each gage and another table listing the details for all the gages. For a certain period of time, not all gages are to be included in the filtered table. If we want a report that will include all the filtered gages with their corresponding gage descriptions, you will need the two tables, linked on the gage ID, for example.

Once you have selected the tables and fields, you then need to establish the link or links between the tables to keep your records organized.

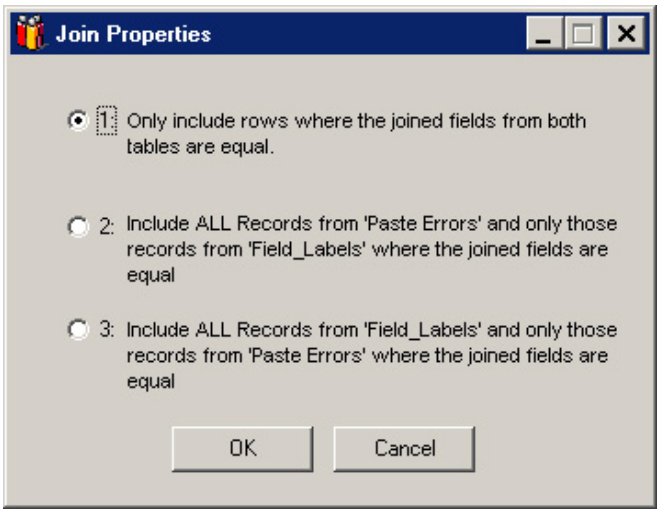
Creating table links:

1 Specify the tables and fields that will be linked and the type of fields that will be used. Populate these fields by selecting these elements from the drop-down menu.

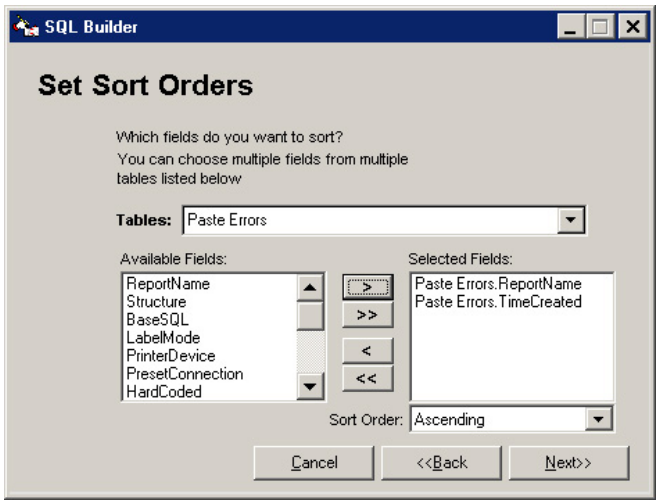


Control	Description
Table 1	Name of the table containing records to be included in the report. "All records" may mean all records subjected to filter, if any. Links may also act as filters. This field has a dropdown list.
Table 1 Linked Field	This is a field common in type and contents between the two linked tables. The names and field sizes may vary but it will only link with exactly the same record. This field has a dropdown list.
Table 2	Name of the table linked with table 1. Not all its records (even if subjected to filter) will be included in the report.
Table 2 Linked Field	This is a field common in type and contents between the two linked tables. The names and field sizes may vary but it will only link with exactly the same record. This field has a dropdown list.
Relationship	You can choose from three types of relationships in this screen. It is a good practice to use the convensions described for *Table 1*and *Table 2* above but these two tables can actually be interchanged as described in selection 2 and 3 of the join properties option.

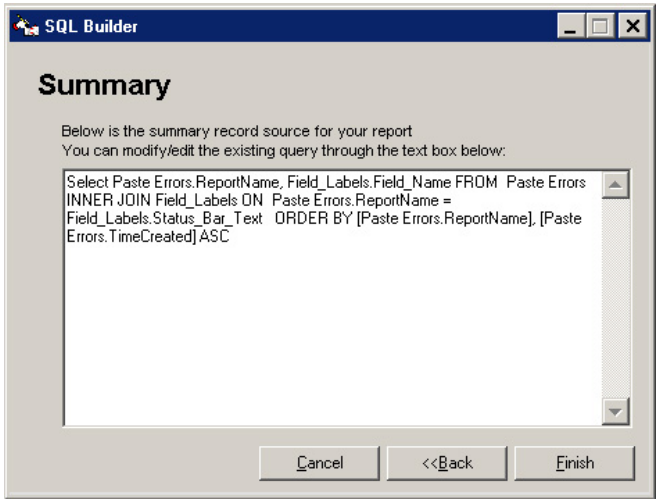
2 Once you have established the links, click NEXT>> to display the relationship window. Activate the radiobutton of your selection and click NEXT>>.


Join Properties
1: Only include rows where the joined fields from both tables are equal.
2: Include ALL Records from 'Paste Errors' and only those records from 'Field_Labels' where the joined fields are equal
3: Include ALL Records from 'Field_Labels' and only those records from 'Paste Errors' where the joined fields are equal
OK
Cancel

3 Now, set the order of the data in your report by specifying which table and what field will determine the arrangement. You are not limited to one table and one field since you are dealing with multiple tables. You also have to set the sort order as to *Ascending* or *Descending*. Click NEXT>> when you're done.



4 The *Summary* screen will appear, displaying the actual SQL statement that will be used to open your data source.

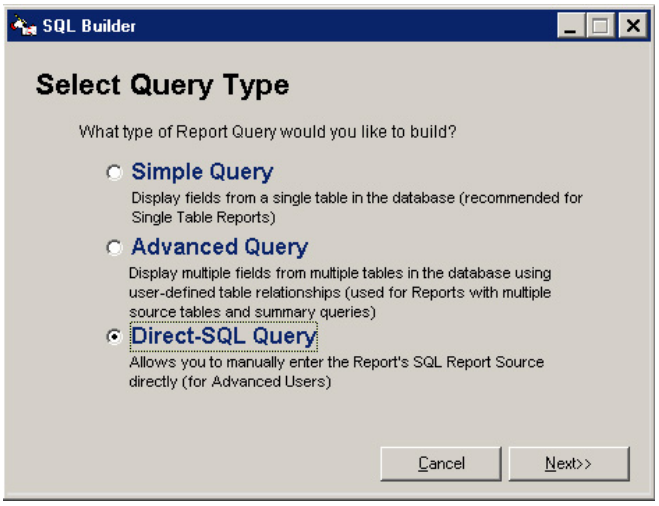

SQL Builder
Summary
Below is the summary record source for your report
You can modify/edit the existing query through the text box below:
Select Paste Errors.ReportName, Field_Labels.Field_Name FROM Paste Errors INNER JOIN Field_Labels ON Paste Errors.ReportName = Field_Labels.Status_Bar_Text ORDER BY [Paste Errors.ReportName], [Paste Errors.TimeCreated] ASC
Cancel
<<Back
Finish

Direct-SQL Query

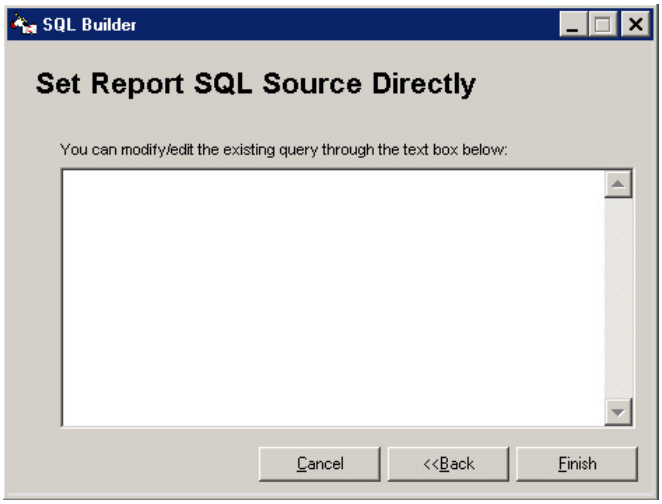
Advanced users can directly enter the SQL statement using this third type of query preparation. Although iIt is assumed that you know the full syntax for creating SQL statements, the basics for creating SQL statements or statement structure has been included to help you get started.

Using Direct-SQL Query:

1 Activate the Direct-SQL Query radiobutton.


SQL Builder
Select Query Type
What type of Report Query would you like to build?
Simple Query
Display fields from a single table in the database (recommended for Single Table Reports)
Advanced Query
Display multiple fields from multiple tables in the database using user-defined table relationships (used for Reports with multiple source tables and summary queries)
Direct-SQL Query
Allows you to manually enter the Report's SQL Report Source directly (for Advanced Users)
Cancel
Next>>

2 The *Set Report SQL Source Directly* window will appear.



Use this screen to set-up your data source. A brief syntax explanation is shown below as a refresher. It instructs the Microsoft Jet database engine to return information from the database as a set of records.

Syntax

```
SELECT [predicate] { * | table.* | [table.]field1 [AS alias1] [, [table.]field2
[AS alias2] [, ...]]}
FROM tableexpression [, ...] [IN externaldatabase]
[WHERE... ]
[GROUP BY... ]
[HAVING... ]
[ORDER BY... ]
[WITH OWNERACCESS OPTION]
```

Control	Description
predicate	Use one of the following predicates: ALL, DISTINCT, DISTINCTROW, or TOP. You use the predicate to restrict the number of records returned. If none is specified, the default is ALL.
*****	Specifies that all fields from the specified table or tables are selected.

Control	Description
table	The name of the table containing the fields from which records are selected.
field1, field2	The names of the fields containing the data you want to retrieve. If you include more than one field, they are retrieved in the order listed.
alias1, alias2	The names to use as column headers instead of the original column names in table.
tableexpression	The name of the table or tables containing the data you want to retrieve.
externaldatabase	The name of the database containing the tables in table expression if they are not in the current database.

Note: To perform this operation, the Microsoft Jet database engine searches the specified table or tables, extracts the chosen columns, selects rows that meet the criterion, and sorts or groups the resulting rows into the order specified.

The minimum syntax for a SELECT statement is:

```
SELECT fields FROM table
```

You can use an asterisk (*) to select all fields in a table. The following example selects all of the fields in the Employees table:

```
SELECT * FROM Employees;
```

If a field name is included in more than one table in the FROM clause, precede it with the table name and the . (dot) operator. In the following example, the Department field is in both the Employees table and the Supervisors table. The SQL statement selects departments from the Employees table and supervisor names from the Supervisors table:

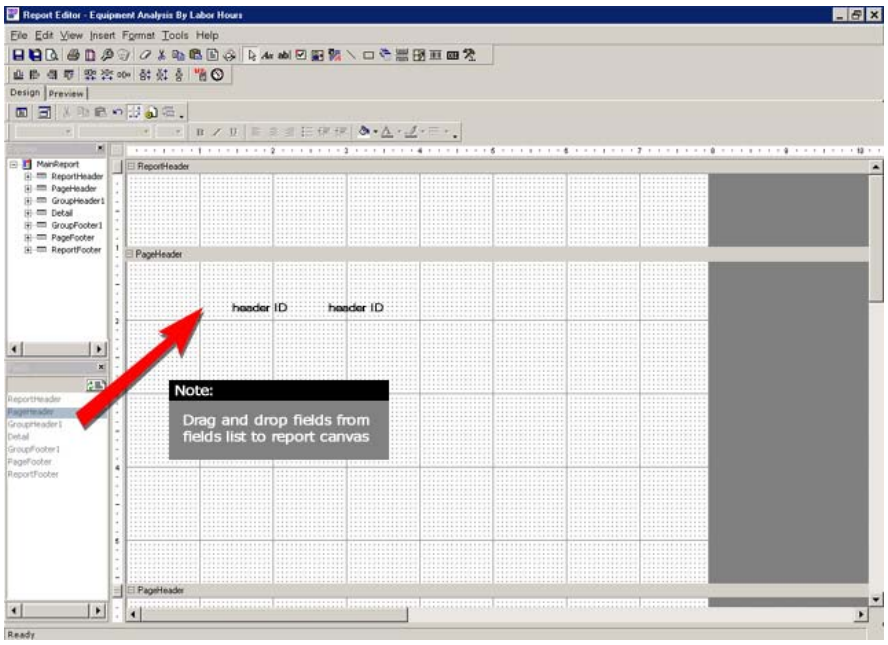
```
SELECT Employees.Department, Supervisors.SupvName
FROM Employees INNER JOIN Supervisors
WHERE Employees.Department = Supervisors.Department;
```

Modifying the Layout

You can edit or change layout objects in the report canvas.

Adding Fields

Fields are easily added to your report by dragging them from the Fields Information box to the report canvas. You may click one or more of the available fields in the Field Information box (hold down either the *SHIFT* key or *CTRL* key while selecting each field using the mouse). Then drag the fields onto the report canvas. For each field that you have selected, a Label and Field will be created.



You can select multiple elements and change common properties such as font all at once. To do this, either hold the left-button of the mouse and drag the cursor while holding the left mouse button encompassing all elements, or simply hold the *CTRL* button while selecting on the items you want to include in your selection.

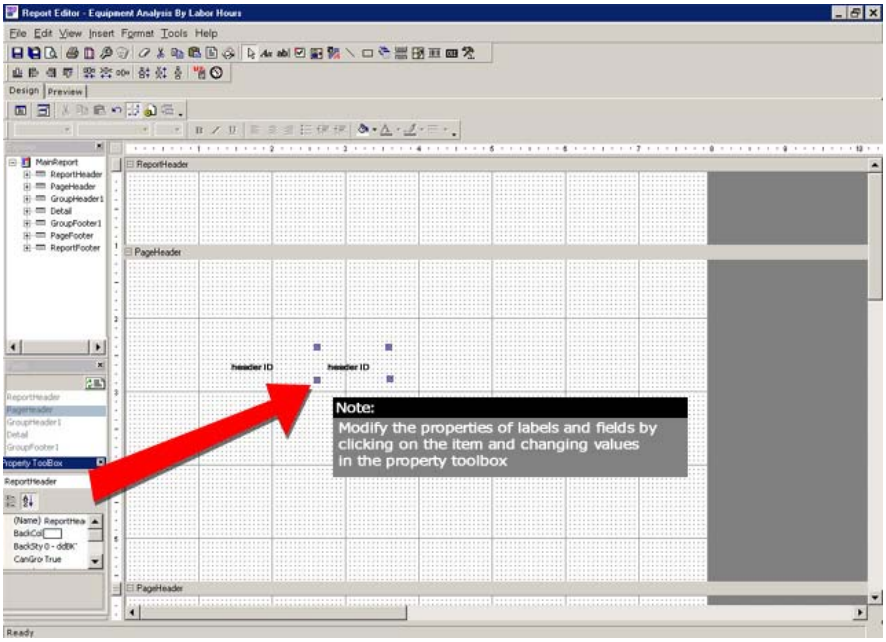
In addition to adding fields that are automatically presented from the data source, you can also add custom fields by clicking the Field button ab|. When you click the Field button, the cursor will become a crosshair that you can use to add your field to the canvas.

To add a field:

1 Click the crosshair cursor in the section of the report canvas where you want to place the field.

2 While holding the right-button of your mouse, drag the cursor until the field is set on desired size (you may also resize the field after you have placed it on the canvas).

3 Release the mouse button to create the field.



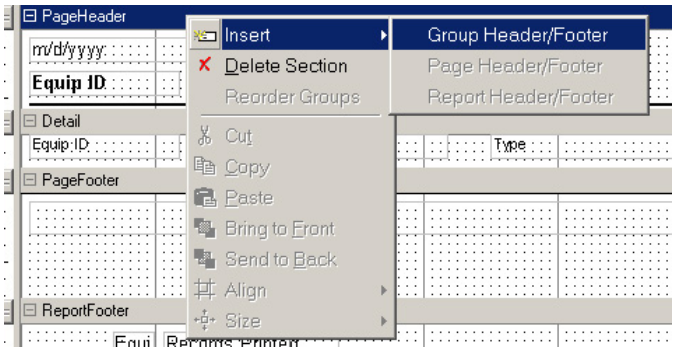
Once you have created the new field, the Report Editor will automatically create a corresponding LABEL. You can modify the properties of either the label or the field by clicking on the item and changing values in the PROPERTY TOOLBOX.

Grouping Data

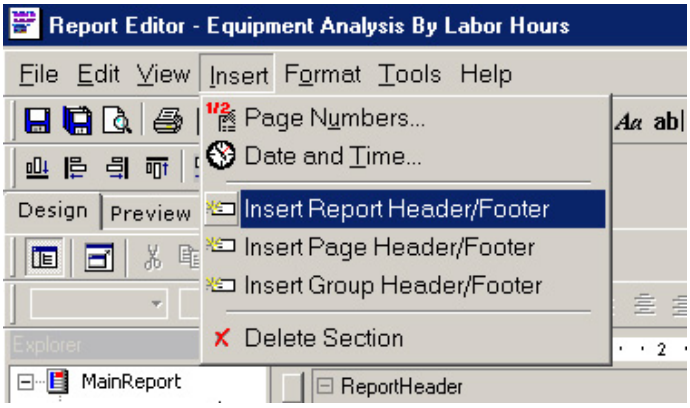
Sometimes, you may need to Group Data to create a special section of your report (either a header or footer) where you can put fields that need to be separated from the rest of the report. For example, in creating a report on Assigned Part Listing By Equipment ID, a group header would contain the Equipment ID number and the rows beneath would enumerate the past calibrations (including the name of personnel who performed each calibration and the date when each calibration was done) for each equipment. The rest of the report might include specific information about that equipment.

To group data, do any of the following:

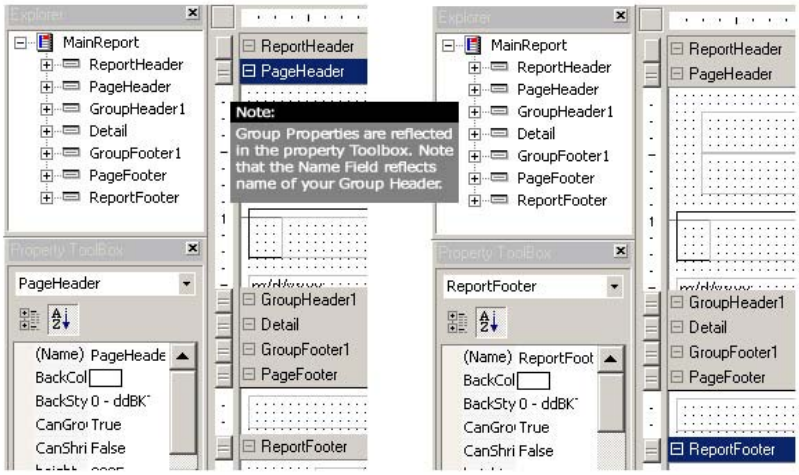
- Bring up the context-sensitive menu by right-clicking anywhere in the designer canvas. Select the Group Header/Footer option from the Insert submenu.



- Select the Insert Report Header/Footer option from the Insert menu.



Both of these methods will add a Report Header and Report Footer to the canvas. You can modify the properties of the header and footer in the Property Toolbox by clicking in the section header of each section. Properties are slightly different for header and footer sections.



Header properties include:

Control	Description
(name)	The name of the Header.
BackColor	The background color of the Header.
BackStyl	Choose *Normal* or *Transparent* from the drop-down

Control	Description
	menu.
CanGrow	Select *True* from the drop-down menu to enable the Header to grow based from the type of data that is included.
CanShrink	Select *True* from the drop-down menu to enable the Header to shrink based from the type of data that is included.
Height	The height of the Header in twips.
Visible	Select *True* to make the Header visible in the report.

Footer properties include:

Control	Description
(name)	The name of the Footer.
BackColor	The background color of the Footer.
BackStyl	Choose *Normal* or *Transparent* from the drop-down menu.
CanGrow	Select *True* from the drop-down menu to enable the Footer to grow based from the type of data that is included.
CanShrink	Select *True* from the drop-down menu to enable the Footer to shrink base from the type of data that is included.
Height	The height of the Footer in twips.
Visible	Select *True* to make the Footer visible in the report
PrintatBottom	Select *True* to always print the Footer at the bottom of the report
KeepTogether, ***NewPage***, and ***PrintatBottom***	These options are only available when you are editing a footer in an existing report. KeepTogether – determines whether a section should print in its entirety on the same page. NewPage - determines whether the Report Editor should insert a page-break before and/or after printing the section. PrintatBottom – sets/returns if group footer section is moved to bottom of page.

Note: It is advisable to change the group header and corresponding name of the group footer to the name of the field on which you grouped. This change will be reflected in the header and footer names on the designer canvas. You can add as many groups as you wish. When you add a field to a Header or Footer, make sure that you include the field defining the group. The information on the fields that you put in this section will only be of the first record for that particular group.

Adding Checkboxes

Checkboxes are especially useful in gathering responses (i.e., yes or no).

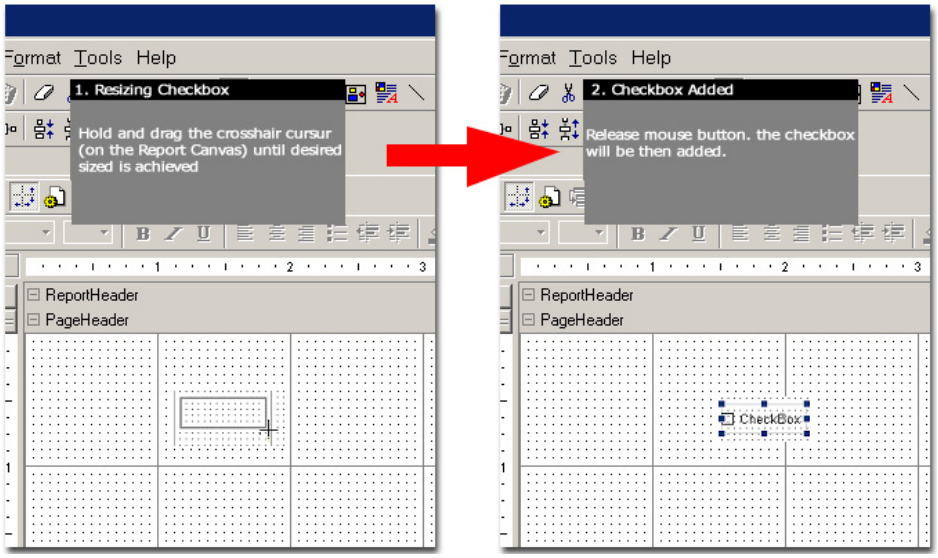
To add a checkbox to your canvas:

1 Click the Checkbox button . The cursor will then become a crosshair. Point the crosshair on portion of the canvas where you want to place your checkbox.

2 Click the left-button of the mouse. Hold and drag until desired size of the checkbox is achieved.

3 Release the button, and observe that the checkbox is added (you may also resize the field after you have placed it on the canvas).

Note: This does not define the actual size of the checkbox, just the size of the checkbox label area.



Like any other field or element on the canvas, you can change the checkbox properties by activating it (indicated by the manifestation of the 8 black squares known as resize handles around the label box) and modifying the property values in the PROPERTY TOOLBOX.

Note: A checkbox relates to a data source element (by selecting a *datafield* value for it in the PROPERTY TOOLBOX).

Adding Other Elements

Besides fields, there are other elements that you can also add to your report. These include:

1 Date/Time Field

2 Page Numbers

3 Labels

4 Bar codes

5 Shapes

6 Images

7 Rich Text Files

8 OLE objects

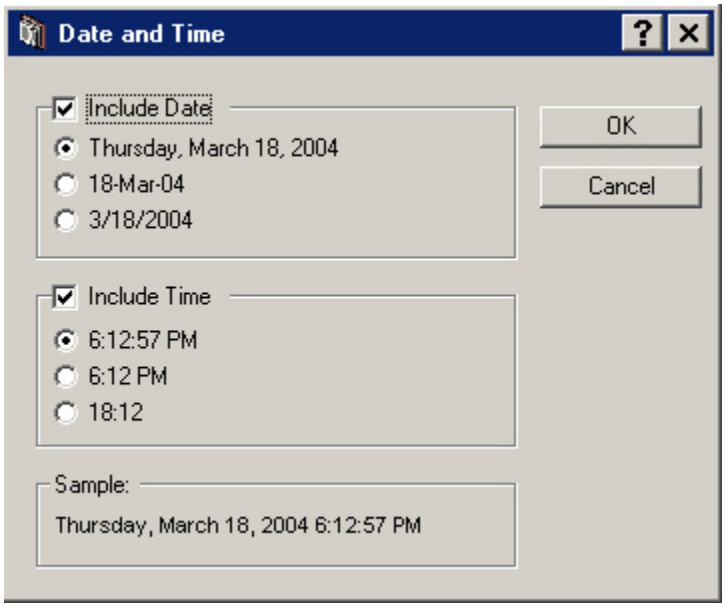
Date/Time Field

The Date/Time Field Element will insert a current date and time stamp field into your report.

To add a Date/Time Field Element, do any of the following:

- Select the Insert Date/Time option from the Insert menu.
- Click on the Insert Date button in the Format floating toolbar.

Both of these methods will invoke the Date and Time window.



You may set date and the time depending on the desired formats:

Control	Description
Include Date	Select this checkbox to include the date as part of your Date/Time Field element. Checking this box will enable one of the following options: {Long Date} — the default option registers the long date format (includes the day, the name and the day of the month, and the year). It will display the current date from your computer. {Abbreviate Date} — the second option registers the date in an abbreviated format. It will also display the current date from your computer. {Short Date} — the final option registers the date in a short format. It will also display the current date from your computer.
Include Time	Select this checkbox to include the time as part of your Date/Time Field element. Checking this box will enable one of the following options below: {Long Time} — the first option registers the exact time up to the last whole second. It will display the current time from your computer. {Short Time}—the second option registers the exact time (up to the last whole minute). It will display the current time from your computer. {Military Time}—the final option registers the time (military style) exact up to the last minute. It will display the current time from your computer.

When you are satisfied, click the OK button to finish and add the configured *Date/Time* element to your canvas.

Note: The date and time automatically update to the current date and time during the printing of the report. Although the Report Editor places the *Date/Time Field Element* in a default location, you can drag it to wherever you want on the canvas as you would any other field or label.

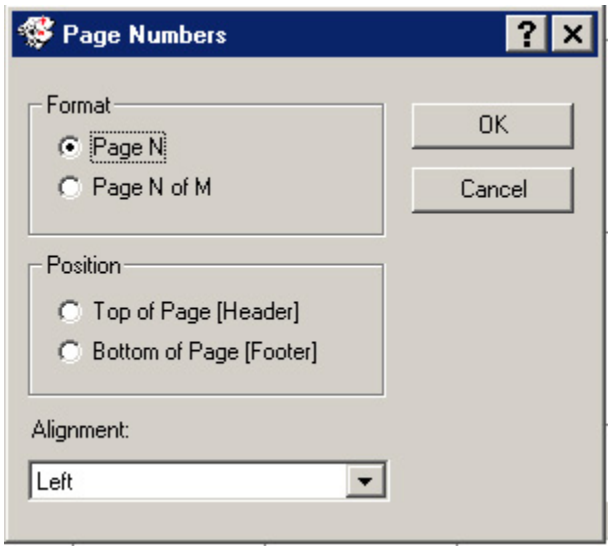
Page Numbers

The *Page Numbers Field* element will insert the current page onto your report.

To add page numbers, do any of the following:

- Select the Insert Page Numbers option from the Insert menu.
- Click on the Insert Page Number button from the Format floating toolbar.

Both methods will invoke the PAGE NUMBERS window.



You may set date and the time depending on the desired formats:

Control	Description
Format	Determines the format of the page numbers. Page N — select this option to display the page number only (i.e., Page 1). Page N of M — select this option to display the current page number (N) with respect to the total number of pages (M), (i.e., page 1 of 10).
Position	Determines the position of the page numbers. Top of Page (Header) — select this option to register the Page Number Field Element in the header of your report. Bottom of Page (Footer) — select this option to register the Page Number Field Element in the footer of your report.
Alignment	Use the drop-down menu to select where the Page Number Field Element should be aligned. ▪ Left — on the left side of the page. ▪ Center — in the center of the page. ▪ Right — on the right side of the page.

Note: By default, Page Numbers are inserted in the PageHeader section.

Labels

Labels can serve two purposes in the Report Editor: identify a field, and identify sections of a report. The ProVIEW 4 Report Editor automatically creates a label for each field you add to the canvas. Labels can also be used in identifying grouped information.

To add a label to your canvas:

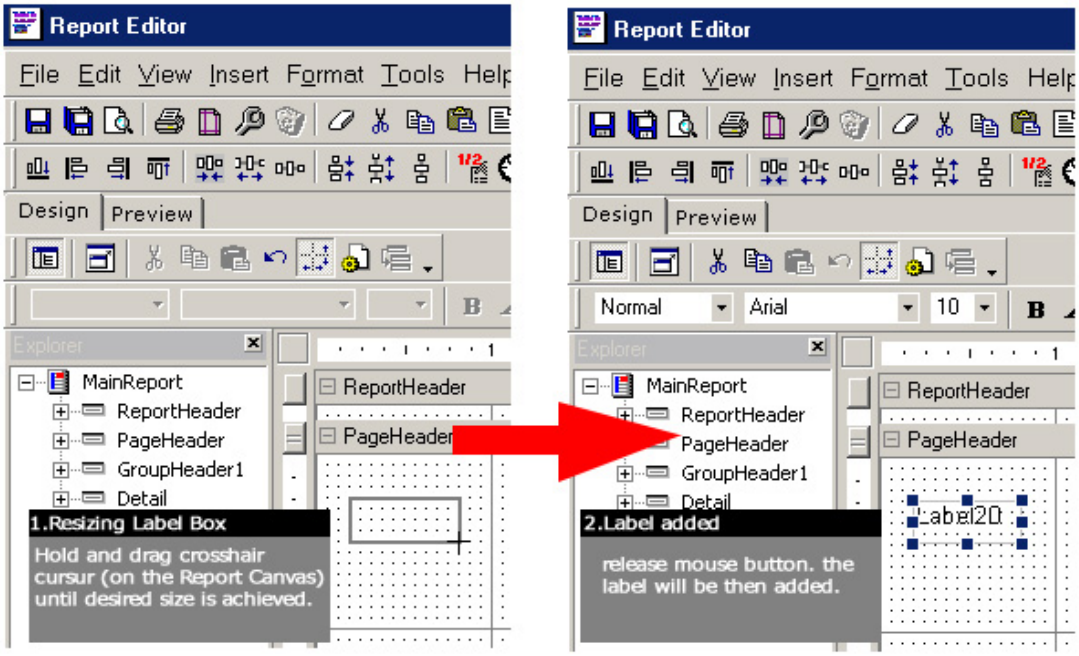
1 Click the Label button in the main floating toolbar. The cursor then becomes a crosshair.

2 Point the crosshair on portion of the canvas where you want to place your label.

3 Click the left button of the mouse. Hold and drag until desired size of the label is achieved.

4 Release the button, and observe that the label is added. You may also resize the label after you have placed it on the canvas.

Like any other field or element on the canvas, you may change the label properties by activating it (indicated by the 8 black squares connected by dashed line, known as resize handles), and modifying the appropriate property values in the PROPERTY TOOLBOX.



You can see what your label will look like printed by selecting the Print Preview button from the main button bar, or by clicking the Preview tab above the information boxes. For more information about printing your report, see the *Output* section on page 44.

Note: There are two key properties for bar code objects—**BarWidth** and **EnableCheckSum**. It is recommended that you set the **BarWidth** property to 2 inches because the resolution of some bar code printers is not fine enough to provide adequate space between bars of the bar code (at less than a 2-inch setting), making for unreadable bar codes. If the **EnableCheckSum** field is set to True, some printers will fail to print the bar code.

Bar Codes

A bar code is simply another type of font composed of vertical bars that represent numbers from zero to nine. You can convert Gage IDs into bar codes by simply adding a

terminator "+" character in the beginning and end of the code, and using a bar code font to display the code.

Bar codes are taken directly from the field data, and the most practical way of creating these without changing your database is by modifying the SQL statement for your data source. You just need to add a new field containing the terminator characters and the code field, and give it an alias, such as "BCode" for example.

You can create a bar code by clicking on the Bar Code button and dragging an area in the Details portion (or any section in) of the report canvas where you wish to place your bar code.

To add a bar code to your canvas:

1 Click the Bar Code button in the main floating toolbar. The cursor then becomes a crosshair.

2 Point the crosshair on portion of the canvas where you want to place your bar code.

3 Click the left-button of the mouse. Hold and drag until desired size of the bar code is achieved.

4 Release the button, and a rectangular area will appear for your bar code (you may also resize the bar code after you have placed it on the canvas).

5 Link the bar code to a specific field. Select the specific field from the DataField property value dropdown list (of the PROPERTY TOOLBOX). Access PREVIEW tab to view bar code in print form.

Currently, there is only one way of linking the barcode item to the barcode field *"Bcode"* you created. Click on the *View Script* button to open the script window. Just follow the syntax below to setup your script for linking the barcode to the barcode field:

```
Sub OnFormat
rpt.Sections(2).Controls("Field10").Caption =
rpt.Sections(2).Controls("DataControl1").Recordset.
Fields("BCode").Value
End Sub
```

For example, *"Field10"* is the name of the bar code field which you have created in your report and *"BCode"* is the data field which you created in setting up your data source. This is VBScript. Just copy the script and remember to keep the lines 2,3 and 4 in one row (between Sub and End Sub). For illustration purposes, the line has been divided into 3 parts to fit the margins.

You can print your bar codes to a label printer by setting the page and printer properties accordingly. To see what your bar code will look prior to printing, select the Print Preview button from the main floating button toolbar or clicking on the PREVIEW tab (above the information boxes).

Lines and Shapes

Report Editor allows the inclusion of two types of geometric figures—lines and shapes—on your report canvas. Lines and shapes are especially useful in defining your report canvas by separating fields, labels, and other sections of a report. Both geometric figures are added on the canvas following a similar method.

To add a line or rectangle:

1 Click the Lines button or the Shape button in the main floating toolbar. The cursor then becomes a crosshair.

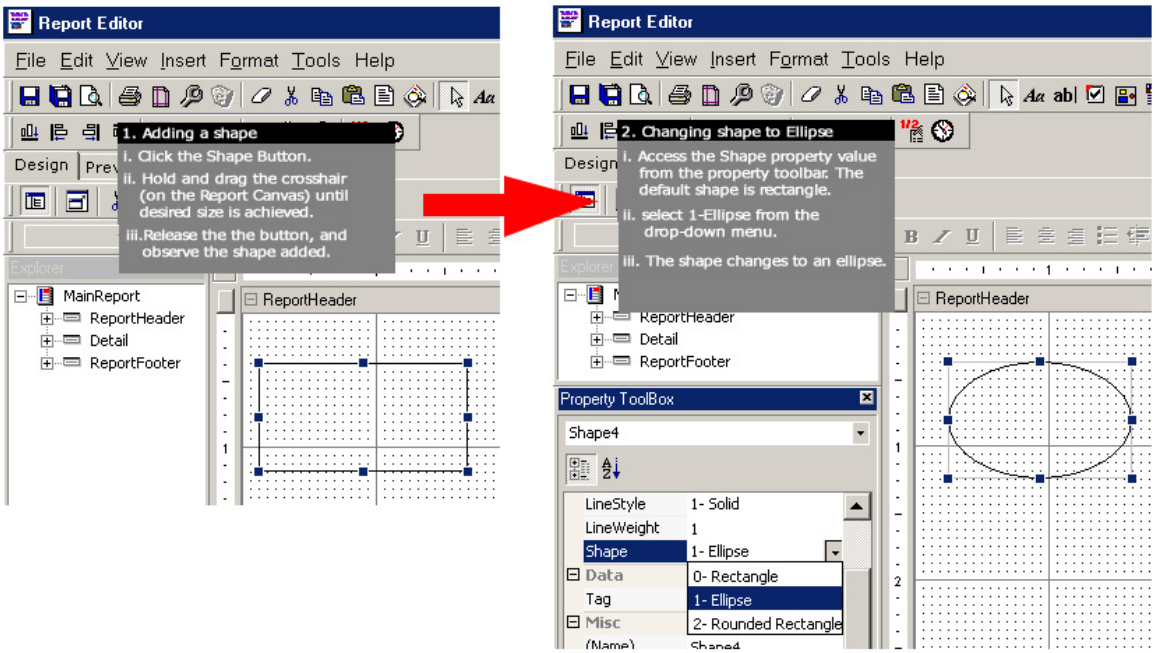
2 Point the crosshair on portion of the canvas where you want to place your line or shape.

3 Click the left-button of the mouse. Hold and drag until desired length of line or size of shape is achieved.

4 Release the button, and observe that the line or shape is added (you may also resize the line or the shape after you have placed it on the canvas).

Like any other field or element on the canvas, you can change the line or shape properties by selecting it and modifying the corresponding property values in the PROPERTY TOOLBOX.

Note: Although the default shape is a rectangle, Report Editor also supports two other shapes—a rectangle with rounded corners and an ellipse. To change the shape (from the default), access the *Shape* Property Value dropdown menu from the PROPERTY TOOLBOX and select *1-Ellipse*.


Report Editor
File Edit View Insert Format Tools Help
1. Adding a shape
i. Click the Shape Button.
ii. Hold and drag the crosshair (on the Report Canvas) until desired size is achieved.
iii. Release the the button, and observe the shape added.
MainReport
ReportHeader
Detail
ReportFooter
2. Changing shape to Ellipse
i. Access the Shape property value from the property toolbar. The default shape is rectangle.
ii. select 1-Ellipse from the drop-down menu.
iii. The shape changes to an ellipse.
Property ToolBox
Shape4
LineStyle 1- Solid
LineWeight 1
Shape 1- Ellipse
Data
Tag
Misc
0- Rectangle
1- Ellipse
2- Rounded Rectangle

Images

You can also place image files (such as logos, graphs, etc) on your report. To add an image, you first need to add an Image box on your canvas, before specifying the image that you are including.

To add an image box:

1 Click the Image button from the main floating toolbar. The cursor then becomes a crosshair.

2 Point the crosshair on portion of the canvas where you want to place your image.

3 Click the left-button of the mouse. Hold and drag until desired size of the image is achieved.

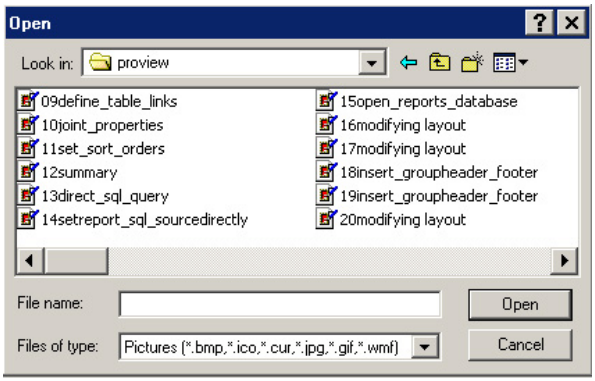
4 Release the button, and observe that the image is added (you may also resize the image after you have placed it on the canvas).

To specify an image:

1 Make sure that the image is activated so you can access its property values in the Property Toolbox. Access the *Picture* property value.

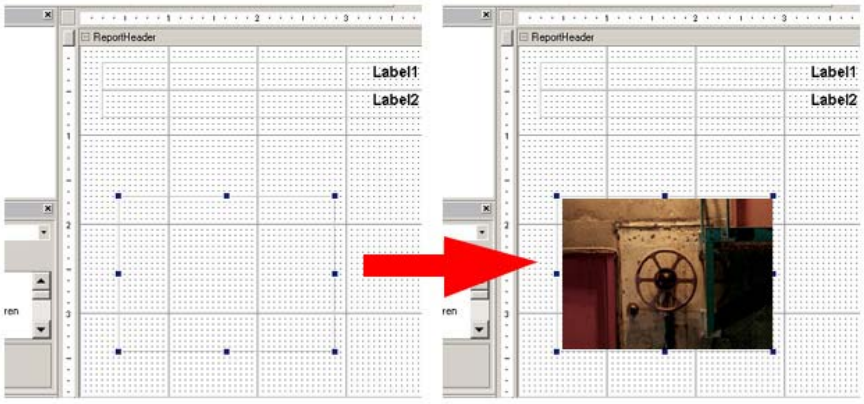
2 Click the *Browse* button that corresponds to *Picture* property value; the OPEN window appears.

3 Locate and specify the image file. Note that the Report Editor supports the following types: Bitmaps (.bmp and .dip); Icons (.ico); Cursors (.cur); JPEG (.jpg); and GIF (.gif).



4 Click the *Open* button afterward. Observe the image is placed onto the image box.

Note: In Report Editor, the image cannot be resized to fit the image box. However, you can resize the image box to accommodate the entire image.



RTF

Report Editor supports objects in the report canvas, which are formatted as Rich Text Format—a universal format type read by all word processors that supports tables and text formatting, among others. This is especially useful if you want to cut-and-paste something from a word processor (like Microsoft Word) into your report without having to re-format it.

To add an RTF field to your canvas:

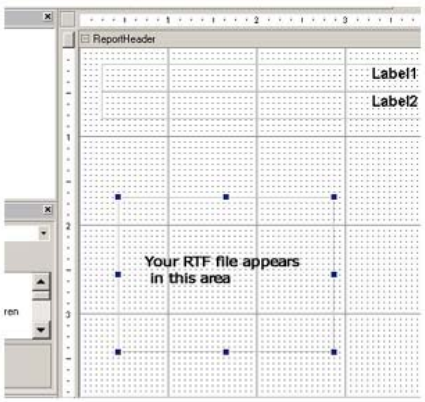
1 Click the RTF button in the main floating toolbar. The cursor then becomes a crosshair.

2 Point the crosshair on portion of the canvas where you want to place your bar code.

3 Click the left-button of the mouse. Hold and drag until desired size of the bar code is achieved.

4 Release the button, and observe that the bar code is added (you may also resize the bar code after you have placed it on the canvas).

5 Link the bar code to a specific field. Select a specific field (that contains .rtf) in the DataField property value dropdown list (of the PROPERTY TOOLBOX). Access preview tab to view RTF file in print form.



Note: Like any other field or element on the canvas, you can change the RTF area properties by selecting it (indicated by the 8 black squares known as resize handles around the label box) and modifying the property values in the PROPERTY TOOLBOX.

OLE

OLE (Object Linking and Embedding) is a feature within MS Windows that allows you to insert files into MS Office documents.

OLE accommodates original documents (whether images, spreadsheets, or word-processing files) into the report, without having to re-type, or cut-and-paste. For example, you may want your report to include a standard agreement on the last page, and that this standard agreement exists as a MS Word file. You can easily link and embed this standard agreement to your report by linking and embedding it from the report canvas. Printing is also easy; you can easily print the whole report–including the objects linked and embedded into the report—with just one command. Furthermore, when you modified the standard agreement, all future reports would print the updated file.

When you edit an OLE object that you have added to your report, Report Editor will open the object in the application that created it. Thus, to edit an MS Word OLE object, the program will open Microsoft Word *within* the Report Editor.

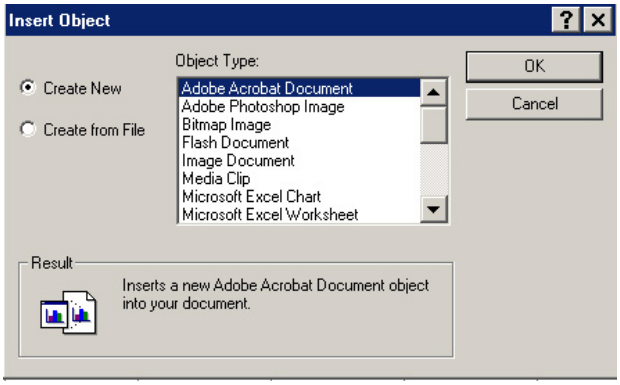
To add an OLE box to your report:

1 Click the OLE button in the main floating toolbar. The cursor then becomes a crosshair.

2 Point the crosshair on portion of the canvas where you want to place your object.

3 Click the left-button of the mouse. Hold and drag until desired size of the object is achieved.

4 Release the button. The Insert Object window appears.



You can either create a new OLE object or link-and-embed an existing file.

To create a new OLE object:

1 Click the *CREATE NEW* radiobutton.

2 Select the application from the Object Type menu list.

3 Click OK.

4 The application will open within Report Editor. Create the document.

5 When finished, click the report canvas. Observe the OLE object placed on the report.

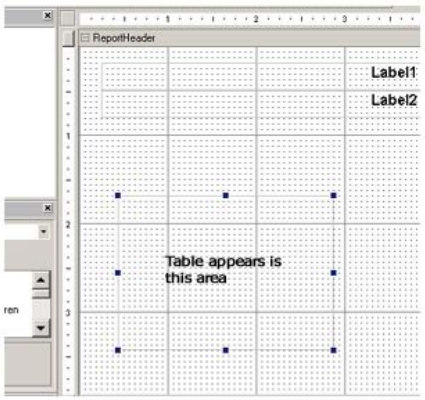
To link and embed an existing object (file):

1 Click the *CREATE FROM FILE* radiobutton.

2 Enter the path of the object in the File field. Or you may click the *Browse* button, map and locate the file.

3 Click OK.

4 Observe the file embedded into the report. Click the report canvas. You may resize the OLE box using the resize handles.



Like any other field or element on the canvas, you can change the OLE box properties by activating it and modifying the property values in the PROPERTY TOOLBOX.

Note: When you select the *Create New* option, the Microsoft Windows OLE function will also save the file you created within the Report Editor on your hard drive**.**

Deleting Objects

To delete an object, simply activate (by clicking) it and press the DELETE key; observe the object expunged.

Note: If you remove a field, its label is not removed automatically. You need to delete it separately.

Modifying the Canvas

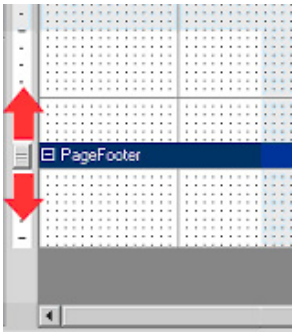
The report canvas represents the physical printable area of your report. Although you can drag and drop as many fields from the FIELDS box to the report canvas, there are times where you may need to enlarge the canvas sections (such as Details, Footers, or Headers) in order to accommodate more fields.

To modify the size of the sections of the report canvas, do any of the following:

1 Click on the SECTION RESIZE button next to the name of the section that you want to change and hold the mouse button. Drag the Section Resize button up or down to change the size of the section.

2 Click on the name of the section that you want to change. This will list its properties in the Property Toolbox. Click on the value for Height, and reset.

Note: When changing the size of a section using the *Height* value in the PROPERTY TOOLBOX, note that the unit of measurement is the *twip*. There are 20 twips per printer's point, or 1440 for every Inch.



Twip

By default, all movement, sizing, and graphical-drawing statements are set in terms of a unit called *twip*. This measurement designates the size of an object when printed. Actual physical distances on the screen vary according to your monitor's size and resolution.

Converting from Inches or Centimeter to Twips

INCHES

Margin = 1440 x n

CENTIMETERS

Margin = 567 x n

Where n is your desired margin in inches or centimeters.

Properties

Each section on the canvas has properties that you can modify—header, details, footer, etc. You can see these properties in the PROPERTY TOOLBOX by activating (clicking) on any part of the canvas area (in the section) or the section title.

The Property Toolbox is divided into two columns:

Control	Description
Property Name	Enumerated on the left column and registers the properties of selected object.
Property Value	Enumerated on the right column and indicates the property values of the selected object. Some properties have dropdown list (i.e., *ColumnDirection* under the object, *Detail*; you may access the dropdown list by clicking the rightmost portion of a particular field value. You may also change the property value if necessary.

By default, the Property Name column is sorted alphabetically (indicated by the Sort Descending button). You can also sort the property values by major categories by clicking the Sort by Category button.

Output

When designing your report, it is imperative to consider the anticipated appearance of the printed output. The Report Editor comes with several settings options to modify the produce the desired appearance of the printed output. These are:

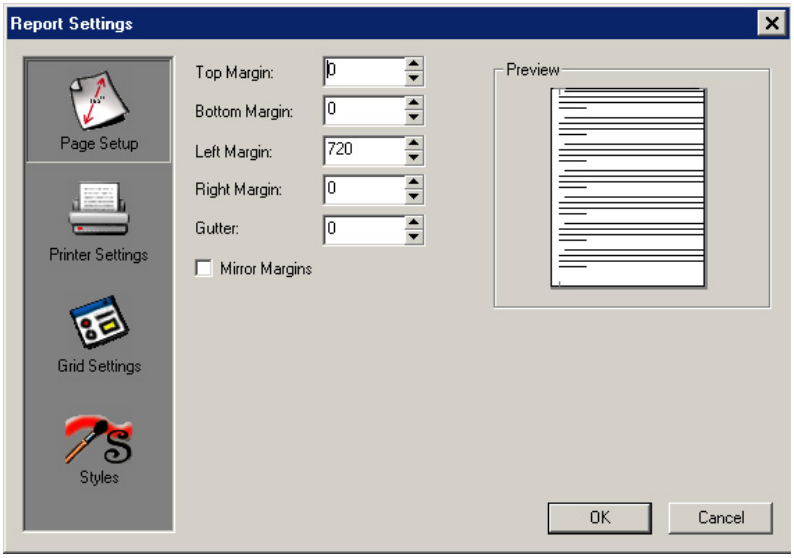
- Page Setup
- Printer Settings

To call up both options, do any of the following:

- Select the PRINTER SETTINGS option from the FILE menu.
- Activate the PRINTER SETUP button in the floating toolbar.

Page Setup

You can define the Page Setup by clicking the *Page Setup* button from the REPORT SETTINGS window.



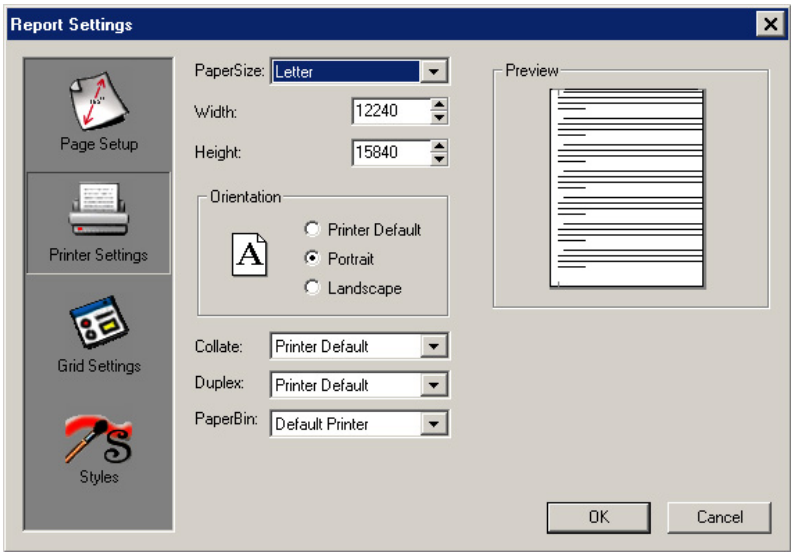
The margin is the nonprintable area on the fringe of the main body of your report. By default, the parameter margins are set to 1440 twips (1 inch). To change the margins you may either manually enter the desired margins on the corresponding fields, or you may click the UP ARROW or DOWN ARROW buttons of the margin you want to change. Clicking the UP ARROW will add 360 twips (¼ inches); the DOWN ARROW will subtract 360 twips (¼ inches).

The gutter, on the other hand, serves as a buffer to your inside margin width and is especially useful in increasing the nonprintable area of your document (such when you bind your report using a ring binder). Thus, if you bind your report using a ring binder, you may want to add a gutter of ¼" to ½" to accommodate for the holes. To change the gutter, you may either manually enter the desired gutter width on the corresponding fields, or you may click the UP ARROW or DOWN ARROW buttons that correspond to the *Gutter* field. Clicking the UP ARROW will increase the gutter width to 360 twips (¼ inches); the DOWN ARROW, decrease 360 twips (¼ inches).

Finally, you can print reports on both sides of a page and still preserve the layout of the page by selecting the *Mirror Margins* checkbox. Checking this box automatically sets your margins in such that the inside margins of facing pages are the same, as well as the outside margins, just as if they are reflected in a mirror. When you check the *Mirror Margins* checkbox, the margin display changes from a single right-hand page to two facing pages with "mirrored" margins.

Printer Settings

You can define the Printer Settings by clicking the *Page Setup* button from the REPORT SETTINGS window.

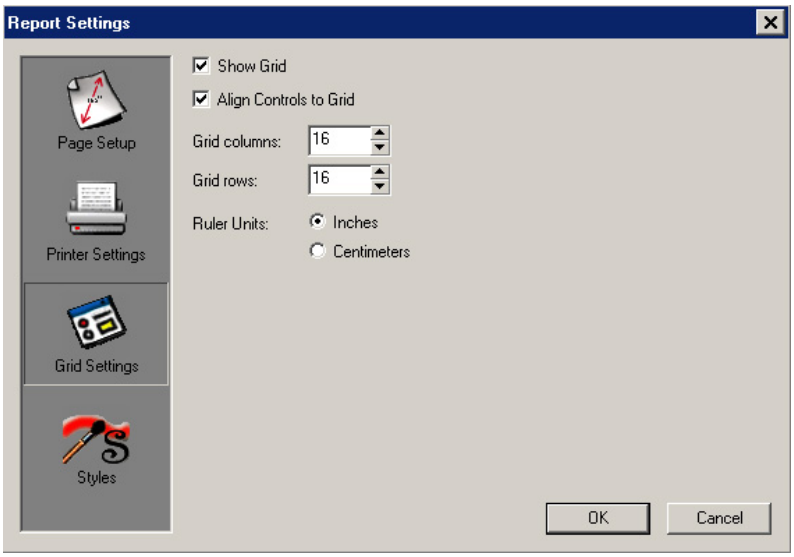


The PRINTER SETTINGS window includes settings to determine how your printer will print the report (based upon the page setup). The ProVIEW 4 Report Editor allows you to either specify settings of your printer or use the application's default printer settings.

Control	Description
Paper Size	This drop-down menu shows the paper sizes your default printer can handle. It is best to view your selection and set this option before you create a report to ensure that your report falls within the boundaries of your page setup. Most printers have default margins or nonprintable edges. Consult your printer manual to determine these settings.
Width	Width is specified in twips. Divide this value by 1440 to convert to inches; divide by 567 to convert to centimeters.
Height	Height is specified in twips. Divide this value by 1440 to convert to inches; divide by 567 to convert to centimeters.
Orientation	You can orient the paper as *Portrait* (oriented vertically) or *Landscape* (oriented vertically). You may also follow the default paper orientation of your printer by selecting *Printer Default*. When you modify these settings, the page preview icon will change to give you a preview of the result.
Collate	Select *Collate* when you are printing several copies of a multi-page report to print each report sequentially. When *Don't Collate* is selected, all copies of page 1 will be printed before all copies of page 2 will be printed, and so on.
Duplex	If your printer offers duplex printing, you can print your file on both sides of the paper.
PaperBin	If your printer features several paper bins, you can use this option to select a specific paper bin to be used. This also allows you to print on paper sizes other than the default, and to use letterheads instead of the usual blank paper.

Grid Settings

You can define the Grid Settings by clicking the *Grid Settings* button from the REPORT SETTINGS window.



The Canvas Grid—comprised of coplanar points that are evenly distributed on the canvas—is intended to guide you in the design and layout of your report. The grid will not appear in your printed report.

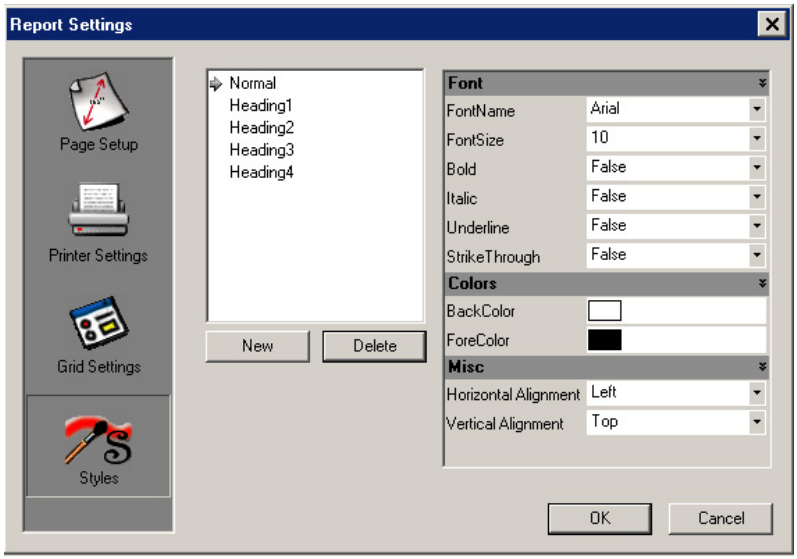
By default, there are 16 co-linear grid points on every square inch of the printable area of the report canvas. You may increase the number of grid points horizontally by modifying the *Grid columns* field and/or vertically by changing the *Grid rows* field. You may either directly enter the desired number of grid columns and rows, or use the corresponding Up Arrow (to increase) and Down Arrow (to decrease) buttons.

Control	Description
Show Grid (Default)	Check this box to show the grid. By default, this box is checked.
Align Contents to Grid (Default)	Check this box to automatically align and snap report items to the grid. This makes moving and aligning items easier.
Grid Columns	The number of collinear grid points in one horizontal ruler unit of a printable part of the report canvas.
Grid Rows	The number of collinear grid points in one vertical ruler unit of a printable part of the report canvas.
Ruler Units	This can either be *Inches* or *Centimeters*.

Note: Sometimes you may want to uncheck the *Show Grid* option to position elements closer together than your grid will allow. Do not forget to recheck this option if you want the elements on the designer canvas to snap to the grid. If you change your grid unit to centimeters, you may want to reduce the number of dots per ruler unit to 10 or 5 to keep your canvas from being overcrowded with grid points.

Styles

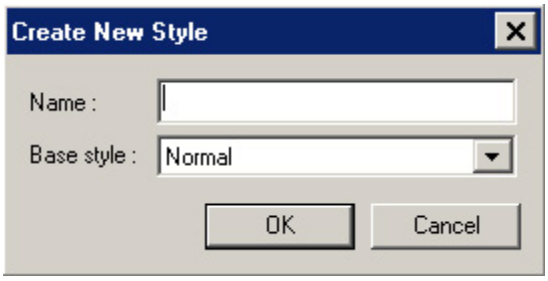
You can set the styles (fonts, headings, etc.) of your report by accessing *Styles* from the REPORT SETTINGS window.



The Report Editor provides five pre-defined styles: Normal, Heading 1, Heading 2, Heading 3, and Heading 4. Aside from these, you can create and define new styles.

To add a new style:

1 Click the NEW button. The CREATE NEW STYLE window appears.



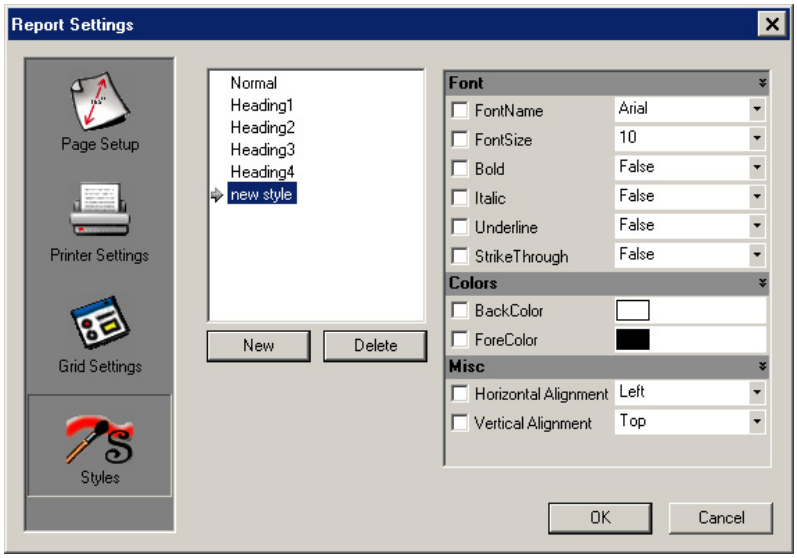
2 Enter the name of the new style on the *Name* field.

3 Select a pre-defined style as basis for the new style from the *Base Style* dropdown menu.

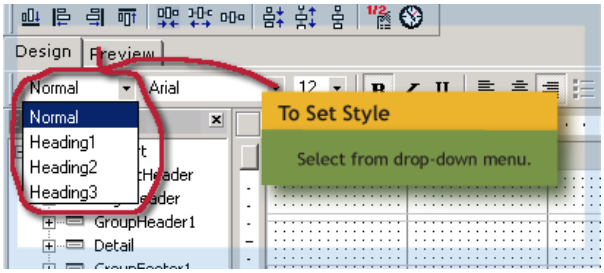
4 Click the *OK* button. The new style will be added, and will initially carry the elements of the Base Style. You may modify these elements (font type and decoration, color, alignment, etc.) by selecting the appropriate option from the dropdown menu of each of the following elements:

Control	Description
FontName	Use the dropdown list to select font.
FontSize	Use the dropdown list to select font size.
FontName	Select *True* from the dropdown list to set the text in bold.
FontSize	Select *True* from the dropdown list to set the text in Italics.
Bold	Select *True* from the dropdown list to underline the text.
StrikeThrough	Select *True* from the drop-down menu to StrikeThrough the text.
BackColor	Click the rightmost portion of the field to display the color

Control	Description
	options; from these you can select the back color.
ForeColor	Click the rightmost portion of the field to display the color options; from these you can select the fore color.
Horizontal Alignment	Select from the dropdown list on how you wish to horizontally align the elements of the report. Options are Left, Center, and Right.
Vertical Alignment	Select from the dropdown list on how you wish to vertically align the elements of the report. Options are Left, Center, and Right.



To apply a text style to an element in the designer canvas, activate (select) it, and then choose the desired style from the leftmost dropdown menu of the main floating toolbar (which is immediately above the ruler) on the Design tab.



Working with Canvas Objects

Every object placed on the canvas can be modified and formatted in terms of Alignment, Spacing, Borders, Frames, Sizing, and Properties.

Aligning Objects

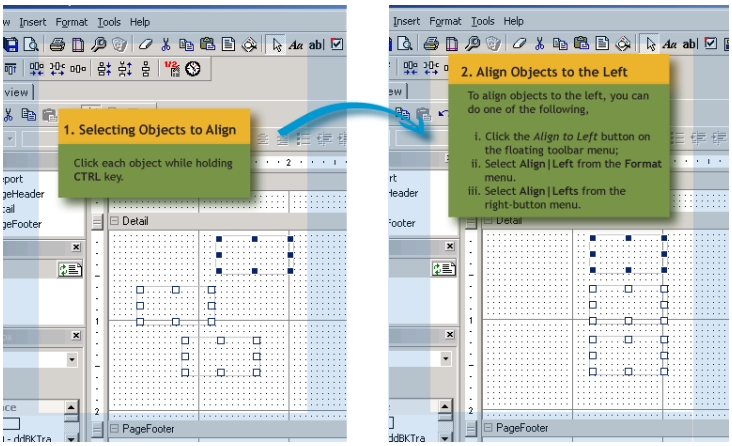
Multiple objects can be aligned both horizontally and vertically.

To align objects:

1 Select the objects you want to align by activating (clicking) each while holding the *CTRL* button.

2 Specify the alignment type by doing any of the following:

- Select the desired alignment type from the Align submenu of the FORMAT menu.
- Click the appropriate button from the floating toolbar.
- Right-click to access the context-sensitive menu and select the appropriate option from the Align submenu.


1. Selecting Objects to Align
Click each object while holding CTRL key.
2. Align Objects to the Left
To align objects to the left, you can do one of the following,
i. Click the Align to Left button on the floating toolbar menu;
ii. Select Align | Left from the Format menu.
iii. Select Align | Lefts from the right-button menu.
Detail
PageFooter

Moving Objects

Objects can be easily moved around the canvas and between sections. To move an object within a section, simply click on it, hold down the mouse button and drag to where you want the object.

To move an object between sections:

1 Select (click) the object (or hold the *CTRL* key while selecting multiple objects).

2 Select Cut from the Edit menu or press *CTRL+X*; the object(s) will disappear.

3 Click on the section header of the section where you want to move the object(s). Then select Paste from the EDIT menu or press *CTRL+P*. The object will then appear.

Spacing Objects

Spaces between objects can be set based on six pre-defined options.

To define space between objects:

1 Select the objects you want to align by activating (clicking) each while holding the *CTRL* button.

2 Specify the alignment type by doing any of the following:

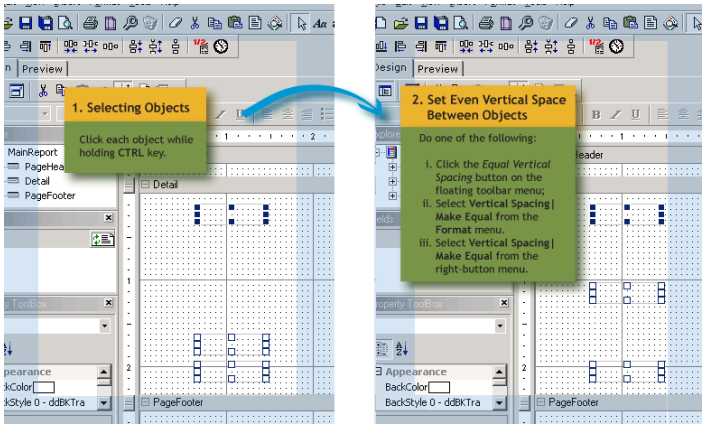
- Select the desired alignment type from the Align submenu of the Format menu.
- Click the appropriate icon from the floating toolbar.

Control	Options
	Increase horizontal space
	Decrease horizontal space
	Make horizontal space equal
	Increase vertical space

Decrease vertical space

Make vertical space equal

- Right-click to access the context-sensitive menu and select the appropriate option from the Align submenu.

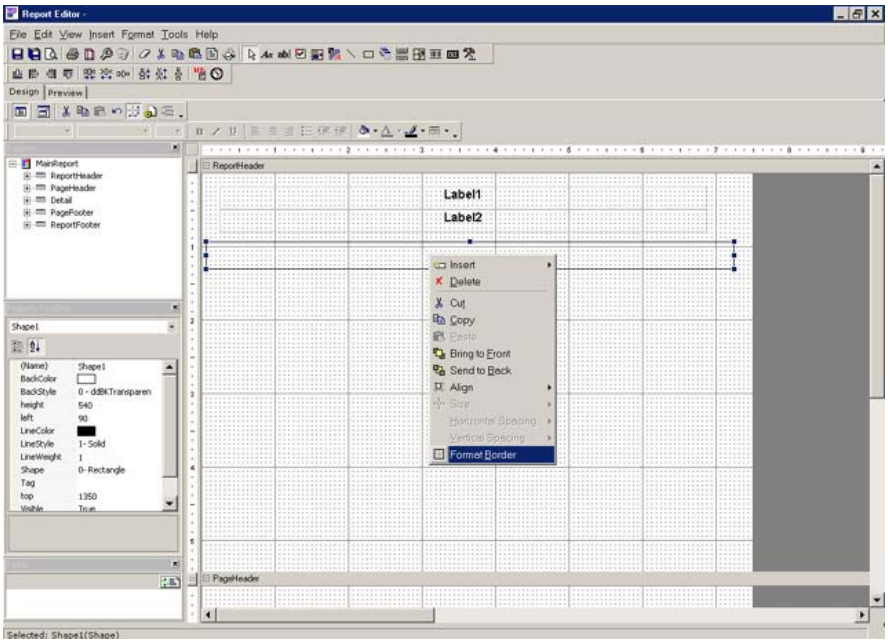

1. Selecting Objects
Click each object while holding CTRL key.
2. Set Even Vertical Space Between Objects
Do one of the following:
i. Click the Equal Vertical Spacing button on the floating toolbar menu;
ii. Select Vertical Spacing| Make Equal from the Format menu.
iii. Select Vertical Spacing| Make Equal from the right-button menu.

Borders

Each object on the canvas can have a border.

To modify the border of an object:

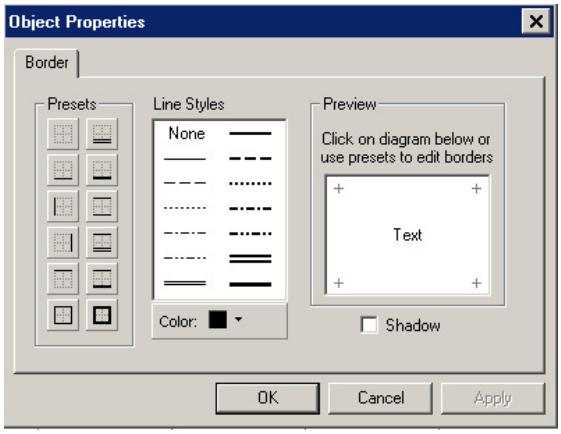
1 Activate the object and right-click the mouse to bring up the context-sensitive menu.



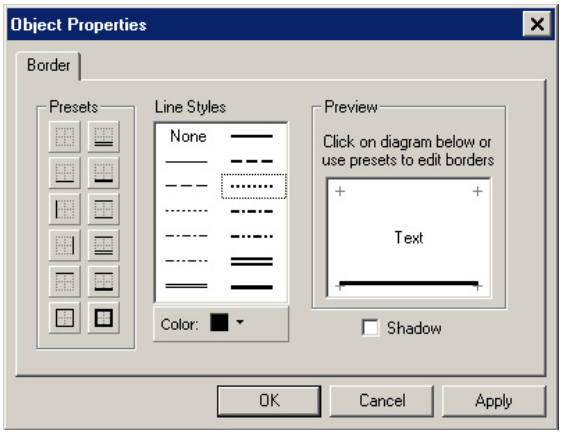
2 Select the Format Border. This will bring up the Format Border window.

3 Define the color of your border by choosing the appropriate button from the dropdown menu.

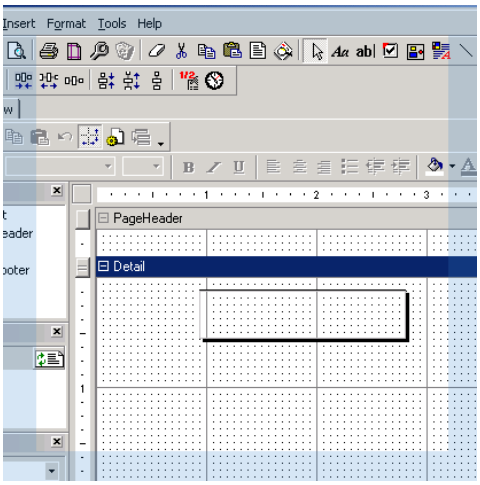
4 Define the border by selecting the appropriate button from the Presets options. The Report Editor will illustrate the border design in the PREVIEW window.



5 Define the type of line for the border by selecting the appropriate button from the Line Style options.



6 Click the Shadow checkbox to render shadow on the object; observe the effect rendered on the PREVIEW image. Click *Apply*, and then *OK*; the OBJECT PROPERTIES window disappears. Observe the border definitions are rendered to the object.



Frames

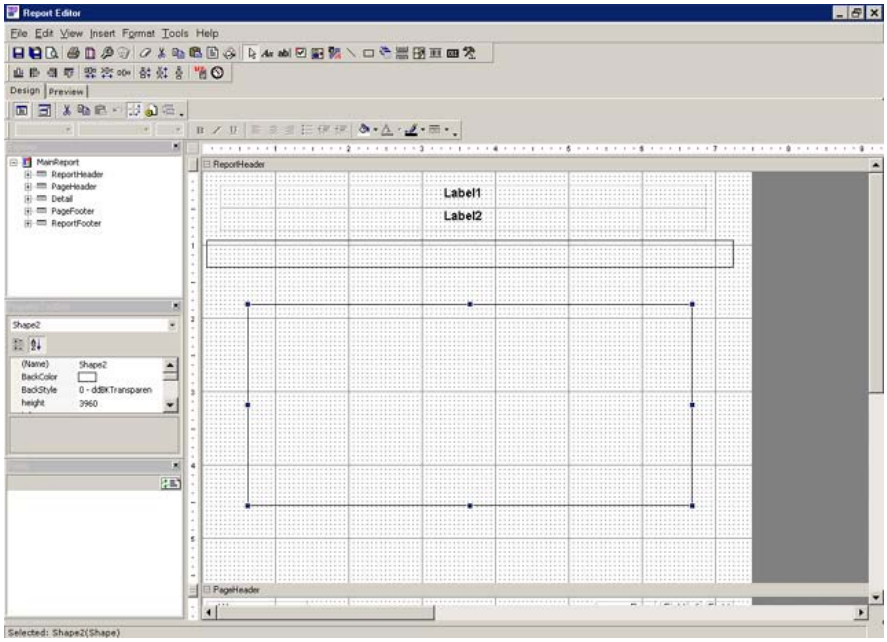
The Frame object is similar to the Table object of MS Word. The Frame Control makes it easier to set up tables and corrects problems with controls and sections related to static objects.

To add a frame to the report canvas:

1 Click on the Frame button in the main floating toolbar. The cursor then becomes a crosshair.

2 Point the crosshair on portion of the canvas where you want to place your object.

3 Click the left-button of the mouse. Hold and drag until desired size of the frame is achieved. Release button.



Each frame is composed of sequentially numbered panes (the pane number is indicated in the lower-left corner of the pane). Each pane can be split horizontally or vertically. When you split a pane, the new pane number will follow that of the pane that was split; thus, if you split pane0, you will then have pane0 and pane1, and consequently if you split pane5, pane6 will be added.

To split a pane, do any of the following:

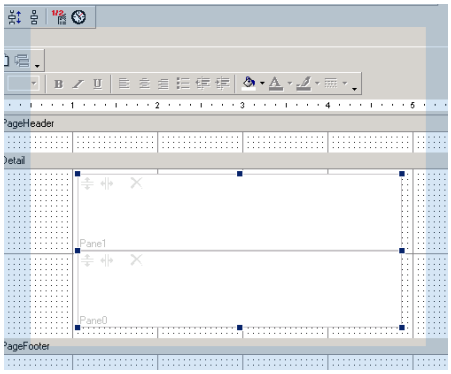
1 Click the Horizontal Split icon or the Vertical Split icon in the pane (located in the upper-left corner of the pane).

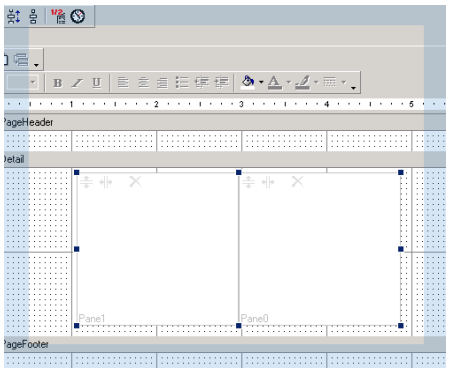
2 Activate the pane, and bring the case-sensitive right-click menu, from which you select *Split Horizontally* or *Split Vertically*.

To undo split pane, do any of the following:

Click DELETE PANE icon on the pane.

Select *Delete Pane* from the case-sensitive right-click menu.





To set order for entire frame or pane:

1 Activate the frame or the pane by highlighting it.

2 Select *Format Border* (for frame) or *Format Pane Border* (for pane) from the context-sensitive right-click menu. The FORMAT BORDER or PANE PROPERTIES window appears.

You can also set the properties of the entire frame object and individual panes using the Property Toolbox.

Note: The frame control has a CloseBorder property to indicate whether or not a line should print at the bottom of the page if a section spans across multiple pages.

Page Break

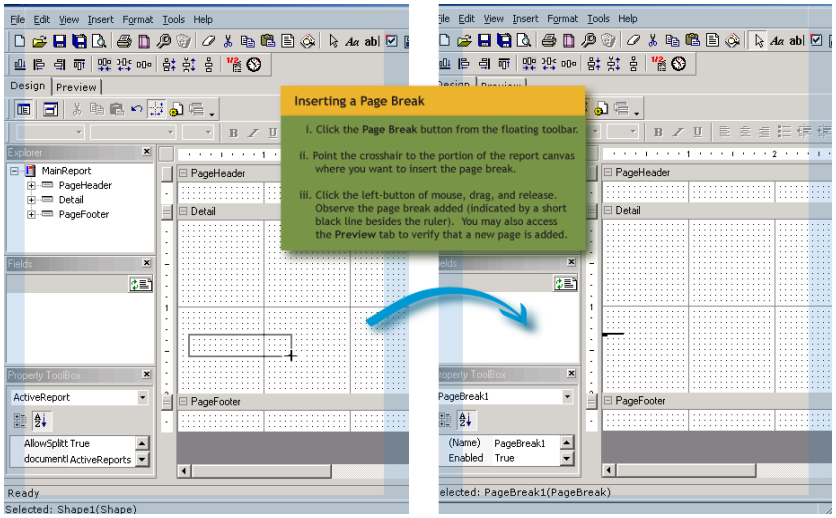
Page Breaks are convenient ways to split your report for printing. You can insert a page break wherever on the report canvas.

To insert a page break:

1 Click the PageBreak button in the main floating toolbar. The cursor then becomes a crosshair.

2 Point the crosshair on portion of the canvas where you want to insert a page break.

3 Hold left-click button of the mouse, drag, and release. A black line representing page break will appear beside the ruler. Verify that a new page is added by accessing the PREVIEW TAB. You may also set the properties of the page break by accessing the PROPERTY TOOLBOX.


Inserting a Page Break
i. Click the Page Break button from the floating toolbar.
ii. Point the crosshair to the portion of the report canvas where you want to insert the page break.
iii. Click the left-button of mouse, drag, and release. Observe the page break added (indicated by a short black line besides the ruler). You may also access the Preview tab to verify that a new page is added.

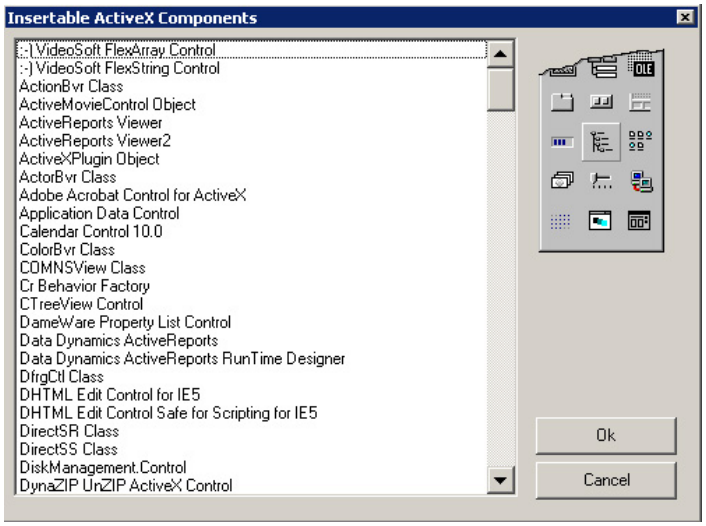
Active X

Active X controls are "advance, interactive" features that provide you the ability to include buttons and objects on your report, which in turn accomplishes certain events such as launching a pop-up window with additional data or a calendar for selecting dates, or generating a graph based from an identified data.

The ActiveX controls that will be made available by Report Editor will depend upon the applications installed on your computer. For example, if you have Microsoft Office installed, dozens of ActiveX controls will become available.

To add an ActiveX control:

1 Click the ActiveX button in the main floating toolbar. The INSERTABLE ACTIVEX COMPONENTS window appears.

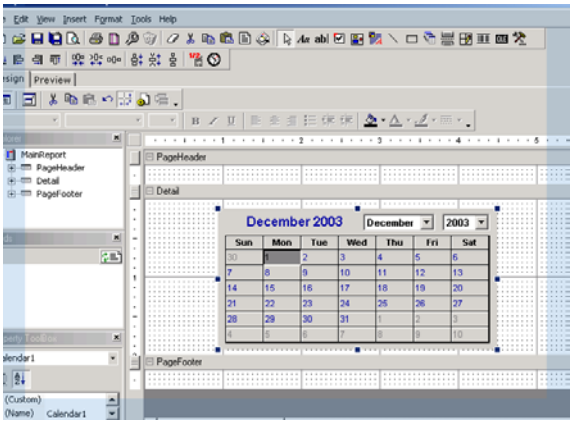


2 Select the control that you want to add. Click *OK*. The window then disappears.

3 The cursor becomes a crosshair. Point the crosshair on portion of the canvas where you want to place your ActiveX object.

4 Click the left-button of the mouse. Hold and drag until desired size is achieved. Release button to display the Active X Object added. You may resize the object by using the resize handles.

5 Simply select the control you want to add to your canvas by clicking on it and then select the *OK* button. This will return you to the main canvas where you will need to place the control. You may also modify its properties in the PROPERTY TOOLBOX.



Using the ActiveX controls available on your operating system can require a considerable amount of technical expertise.

Sizing Objects

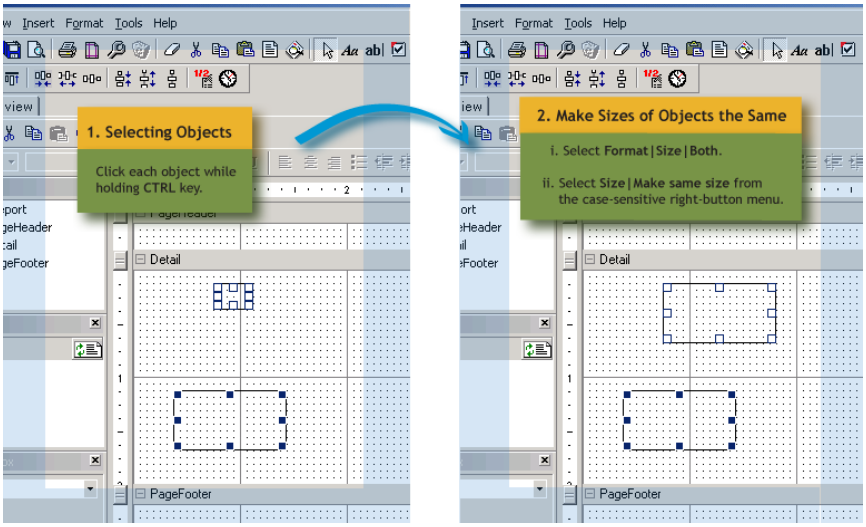
You can also define the sizes of objects.

To resize objects:

1 Select the objects by activating (clicking) each while holding the *CTRL* button.

2 Specify the alignment type by doing any of the following:

- Select the desired option from the Size submenu of the FORMAT menu. Options include Same Width, Same Height, and Both.
- Right-click to access the context-sensitive menu and select the appropriate option from the Size submenu. Options include: Make same width, Make same height, and Make same size.



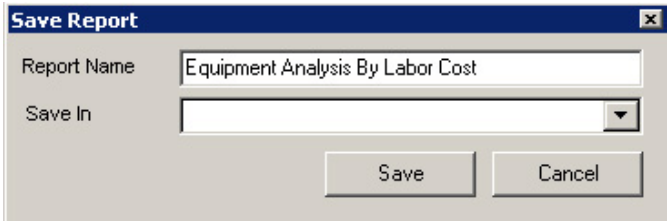
Note: When setting the sizes of two or more objects, Report Editor will follow the size of the object with solid black squares.

Saving Reports

Saving a new report that is based on a template is slightly different than saving a new blank report.

To save a report based on a template, do any of the following:

- Select the SAVE AS option from the File menu.
- Click the SAVE AS button from the Button Bar.



Provide the name of the report in the *Report Name* field. Click *Save*.

To save updates of an existing report, do any of the following:

- Click the Save button .
- Select File|Save.
- Press *CTRL+S*.

Chapter 5: Editing Subreports

A subreport is a report within a report; and each subreport pertains to a record in the main report. It is a convenient way of including details into your report, which normally cannot be accommodated by the SQL Statement of a regular report.

ProVIEW 4 Report Editor includes reports with built-in subreports you can edit or modify. These are:

1 Part Listing

2 Status

3 Supplier Listings By Equip ID with equip data

4 Supplier Listings By Supplier Name with equip data

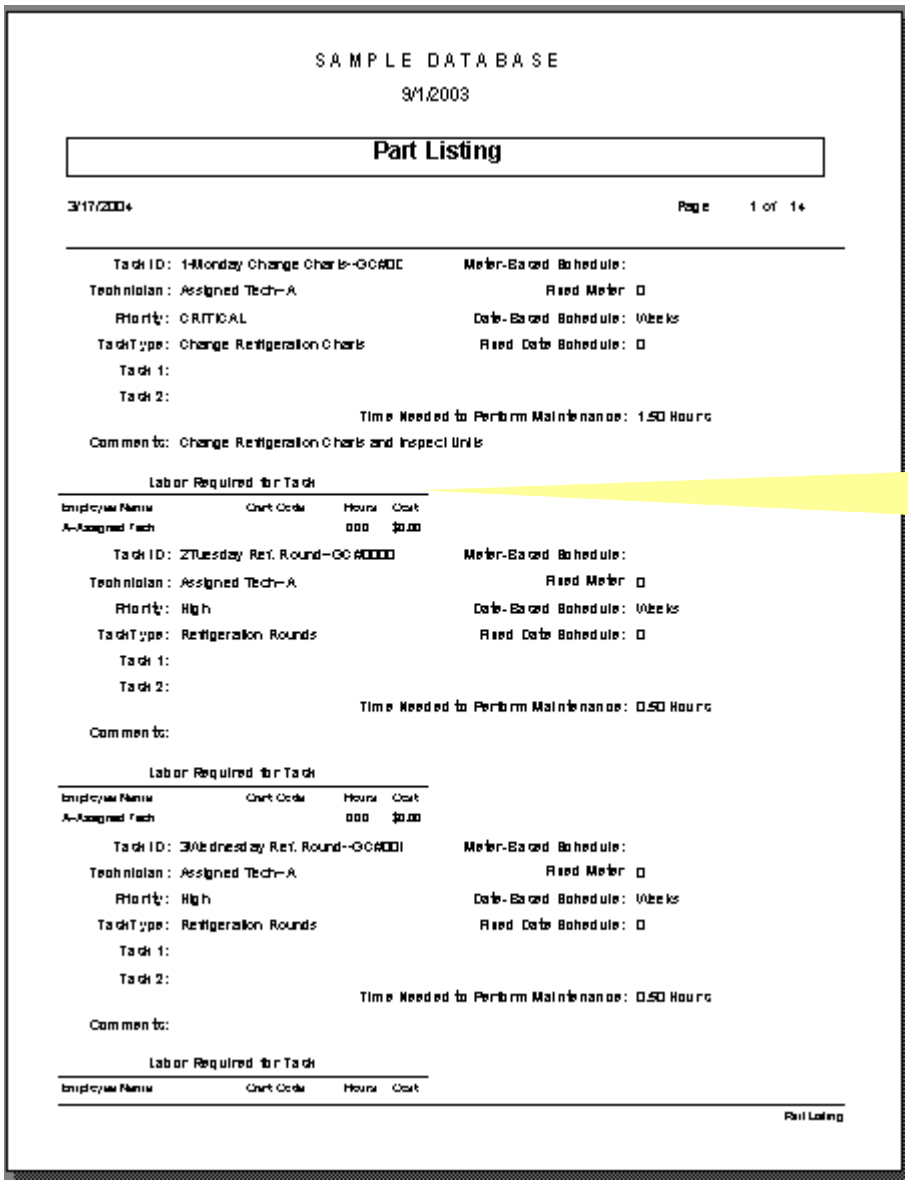
5 Supplier Listings By Supplier Type with equip data

6 Suppliers Listings with equip data

7 Task Detail Listing

8 Work Order

9 Work Orders Due Listing



SAMPLE DATABASE

9/1/2003

Part Listing

3/17/2004 Page 1 of 14

Task ID: 1-Monday Change Charts-GCADC Meter-Based Schedule:
Technician: Assigned Tech-A Fixed Meter 0
Priority: CRITICAL Date-Based Schedule: Weeks
TaskType: Change Refrigeration Charts Fixed Date Schedule: 0
Task 1:
Task 2:
Time Needed to Perform Maintenance: 1.50 Hours
Comments: Change Refrigeration Charts and Inspect Units

Labor Required for Task

Employee Name	Chart Code	Hours	Cost
A-Assigned Tech		000	$0.00

Task ID: ZTuesday Ref. Round-GCA0000 Meter-Based Schedule:
Technician: Assigned Tech-A Fixed Meter 0
Priority: High Date-Based Schedule: Weeks
TaskType: Refrigeration Rounds Fixed Date Schedule: 0
Task 1:
Task 2:
Time Needed to Perform Maintenance: 0.50 Hours
Comments:

Labor Required for Task

Employee Name	Chart Code	Hours	Cost
A-Assigned Tech		000	$0.00

Task ID: 3Wednesday Ref. Round--GCADDI Meter-Based Schedule:
Technician: Assigned Tech-A Fixed Meter 0
Priority: High Date-Based Schedule: Weeks
TaskType: Refrigeration Rounds Fixed Date Schedule: 0
Task 1:
Task 2:
Time Needed to Perform Maintenance: 0.50 Hours
Comments:

Labor Required for Task

Employee Name	Chart Code	Hours	Cost

Part Listing

Subreport labor attached to each Part Listing report.

Note: Link fields are very critical. Fields must be of the same type–requiring the same name but not necessarily same content. However, here we have assigned the same name for fields with same type of data. Also, primary key fields (common fields with unique values, which are used to link tables) must have the same type of content.

Subreports are designed in a separate design canvas and then linked into the main report document through the embedded subreport object (for more information about this object, see *Chapter 7: Working with Advanced Reports* on page 65). You must make sure that it contains a least one field that is common with the table you are linking it to (contents and type).

There are two key advantages to using subreports:

1 Re-usable— Subreports are individual reports within ProVIEW 4, accessible like any other report. Because of this, they can be re-used as subreports, as many times needed.

2 Automatic Updating— A subreport is a link to an external report in ProVIEW 4. When you make a change to a subreport (that is already embedded into 1 or more other reports), the changes are automatically reflected in any reports onto which it is embedded.

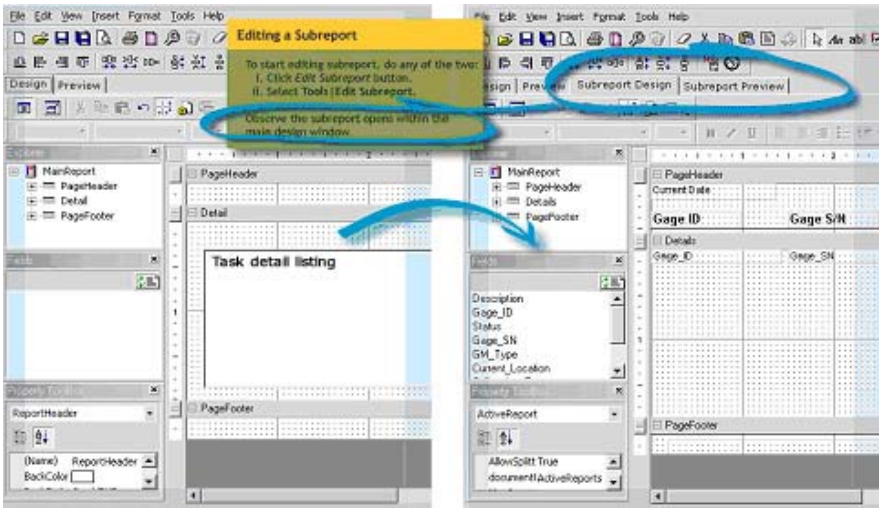
To edit subreports:

1 Open the report with the subreport you want to edit.

2 Do any of the following:

- Click on the EDIT SUBREPORT button from the button bar.
- Select the Edit Subreport option from the TOOLS menu.

3 The subreport will open in the main design window.



Notice that Report Editor creates two new tabs in the main design wondow: SUBREPORT DESIGN and SUBREPORT PREVIEW. These tabs function like the DESIGN and PREVIEW tabs, and allow you the same functionality for editing a normal report, such as:

- Grouping Data (see page 31).
- Adding fields and objects to the report canvas (see page 29).
- Modifying canvas section and object properties (see page 43).

If you access the subreport to view its contents and do not make changes, you can select the DESIGN tab to return to the main report. If you accessed the subreport and you've edited its contents, you need to save the subreport prior to accessing the Main Report's DESIGN tab.

Saving Subreports

Saving a Subreport is similar to saving a report. Please refer to *Saving Reports* on page 57.

Chapter 6: Creating Labels

Report Editor provides you with several pre-defined templates for creating your labels.

Building a Label from a Predefined Template

From the Records Listing pane, you can choose a template from any of the following options:

1 Work Order Label – 1/2W x 1L

2 Work Order Label – 1/2W x 2L

3 Work Order Label – 1/2W x 3L

4 Work Order Label – 1W x 1L

5 Work Order Label – 1W x 2L

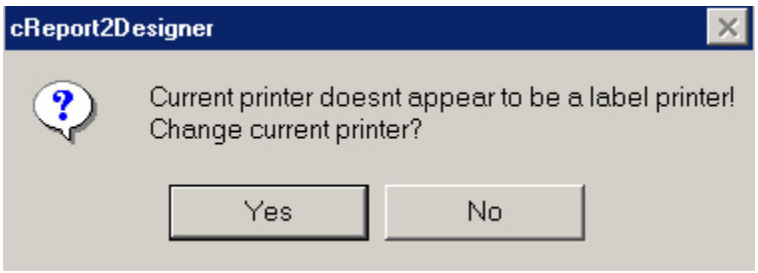
6 Work Order Label – 1W x 3L

To begin creating your label from a template:

1 Select the label you want from the records Listing pane.

2 Highlight the selection and click DESIGN from the report menu.

You will be prompted that your printer is not a label printer and the program will ask you if you want to change to a label printer. For the meantime, select No to open the label in the report canvas.



Editing a label template is similar to editing a report template—you need to select a data source (see page 20) and add objects (see page 29). You can print your labels as you would a report (see page 44).

Chapter 7: Working with Advanced Reports

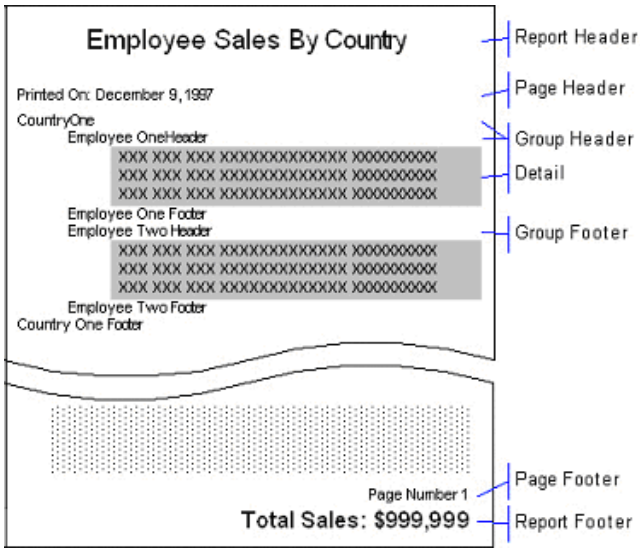
Report Editor supports a number of advanced features to create more dynamic, flexible reports. The level of expertise required to utilize these features is generally high—from basic knowledge of formulating Visual Basic scripts to building SQL statements. You must also have knowledge on how Data Dynamics Objects, Variables, and Report Events work in order to begin programming with the Report Editor. Some reports may require runtime calculations on fields, passing the value of a field to another element, and so on. Due to some functional flexibility requirements of some of the built-in reports, you may need to perform some programming tasks to accomplish non-trivial tasks on complex reports.

Structural Design of Reports

Before you start utilizing Report Editor's advanced reporting features, you need to understand how a report is structured and the dynamic controls and events that make up the sections of the report. To understand the various sections of a report, you need to know about three core components:

- Report Sections architecture
- Section Events
- Report Processing

Report Sections



A report section contains a group of controls that are processed and printed at the same time as a single unit. The section types are as follows:

- Report Header
- Page Header
- Group Header
- Detail
- Group Footer
- Page Footer
- Report Footer

Report Header

A report can have only one report header section, which appears at the beginning of the report. It is generally used to print a report title, a summary table, a chart, or any information that needs to appear only once at the beginning of the report.

Page Header

A report has a page header section that appears at the top of each page. It is the first section that prints on a page except when it contains a report header section (as in front pages of most reports). The page header section is used to print column headers, page numbers, a page title, or any information that needs to appear at the top of each page.

Group Header/Group Footer

A report can consist of single or multiple (nested) groups, with each group having its own header and footer sections. The Goup Header section(s) are inserted and printed immediately prior the Details section; Group Footer Section(s), after the Details section.

The number of Group Header/Footer sections depends on how the report data is grouped. The Report Editor starts a new group (Header, Detail, and Footer) when the data value for the field changes.

Details

A report can only contain one Details section, which is the body of the report. Subreports are contained usually within the detail section, or sometimes in any of the group sections. For more information about subreports, see *Chapter 5: Editing Subreports*, on page 59.

Page Footer

A report can only have a single page footer section, which appears at the bottom of each page. It is used to print page totals, page numbers, or any other information that needs to appear at the bottom of each page.

Report Footer

A report can only have a single report footer section, which appears at the end of the report. A Report Footer may usually contain a summary of the report, summary of statistics (such as grand totals for sales reports), or any other information that can only appear at the end of the report.

Events

Reports are composed of several events, from which you can add scripts to customize your reports. These events can be classified into two main categories:

Control	Description
Active Report	This is the entire report, and supports the following events: ▪ OnReportStart ▪ OnReportEnd ▪ OnPageStart ▪ OnPageEnd ▪ OnHyperLink ▪ OnDataInitialize ▪ OnFetchData ▪ OnNoData ▪ OnPrintProgress ▪ OnError
Individual Sections	The background color of the Footer. ▪ Format ▪ BeforePrint ▪ On

Active report

The following events are supported by an active report:

OnReportStart

This event is triggered immediately when a report runs. It fires only once, and is the first event to fire at report runtime.

OnReportEnd

This event is triggered immediately when a report ends. It fires only once, and is the last event to fire at report runtime.

OnPageStart

This event is triggered before a report starts processing a page.

OnPageEnd

This event is triggered after a report has processed a page.

OnHyperLink

Triggered when a hyperlink on a report is clicked. The event can be used to redirect the hyperlink or to prevent a hyperlink from activating.

OnDataInitialize

This event is triggered before *OnReportStart* adds custom fields to report fields collection. Custom fields can be added to a bound report (one that uses a data control to connect and retrieve records) or an unbound report (one that does not depend on a

data control to get its records). In a bound report, the recordset is opened and the recordset fields are added to the custom Fields collection then the *DataInitialize* event is fired so that a new custom field is added.

OnFetchData

This event is triggered whenever a new record is processed. Usually, this event is used to set the values of custom fields that were added in the *OnDataInitialize* event.

OnNoData

This event begins when the report does not return any records.

OnPrintProgress

This event is triggered after each page is printed during a print job.

OnError

This event is triggered as a result of an internal error in the report.

Note: If you do not code an event procedure for the *Error* event, the built-in *ActiveReports* display message will display the error message.

Section Events

There are three events for each section, regardless of the sections' type of content: *Format*, *BeforePrint*, and *AfterPrint*. Because there are many possible report designs, the event triggering sequence of your report must be dynamic in order to satisfy individual report demands.

Format

This event is triggered after the data is loaded and bound to the controls contained in a section, but before the section is rendered to the canvas. The format event is the only event where the section's height may be changed. This section is used to set or change the properties of any controls, or load subreport controls with subreports.

If the *CanGrow* or *CanShrink* property of any control contained within a section (or the section itself) is set to true, all of the growing and shrinking of controls contained in this section, and the section itself, takes place in this event. Because of this, information about a control or section's height cannot be obtained in this event.

BeforePrint

This event is triggered before a section is rendered to the canvas. The growing and shrinking properties of a section, and all controls contained in a section, will transpire before this event is triggered. Use this section to resize any controls.

Since all controls and section resizing take place before this event is triggered, BeforePrint is used to set an accurate height of the section or any control contained. You may resize any control in this event but you cannot resize the section itself.

AfterPrint

This event is triggered after the section is rendered to the canvas. When you are placing a code in the section events, you are likely to place your code in the Format or

BeforePrint events. The *AfterPrint* event is still useful for drawing on the canvas after text has already been placed on the canvas.

Report Processing

The speed in processing and generating output is achieved from intelligent, multi-thread, single-pass processing. The program will process and render each page as soon as the page is ready. If the program is not able to fully render a page, such as when some of its data elements remain unknown, or when its layout is not yet final, the page is cached until the data becomes available.

Summary fields and *KeepTogether* constraints are the two common reasons on why a page is not immediately displayed. The summary field is not completed until all the data needed for calculation is read from the data source. When a summary field such as a grand total is placed ahead of its completion level (such when it is placed in the report header), the report header section and subsequent sections will be delayed until all data (relevant to the report header) are read.

Scripts

Scripts are very useful for posting data that can be calculated from other existing fields. For example, if you create a field that displays the total of the values of a certain group of fields, conventional processing will require tables to be updated for totals whenever reports are generated. Aside from the fact that this takes up space, recalculation may sometimes be even missed, and reports are left with non-updated values. Also, there could be a number of different calculations for value fields that do not need to have results stored in the actual table—such as when a calculated field depends on several combinations of fields, prompting you to create several extra fields. Scripts get rid of these inconveniences, and hasten the processing of output.

In addition to scripts, Report Editor includes a table for report controls, which lists Control IDs, Report Names, and Control Names. This enables the program to automatically add labels by tagging controls to Control IDs and displaying the corresponding report or control name. This enhances uniformity in labels and automatic updates of labels. SQL statements in scripts link these labels to your reports. For example, if your company needs to comply with ISO 9000 or QS 9000 document identification and control requirements, you can identify each report with a unique document control number.

Script Location

There are several locations in the Report Editor window where you can insert and view scripts. These include:

- The *Tag* value in the PROPERTY TOOLBOX for the section or object currently selected
- The SCRIPT EDITOR window (only used for document-based scripts such as Footer, Header, Detail, etc.)

Adding Scripts

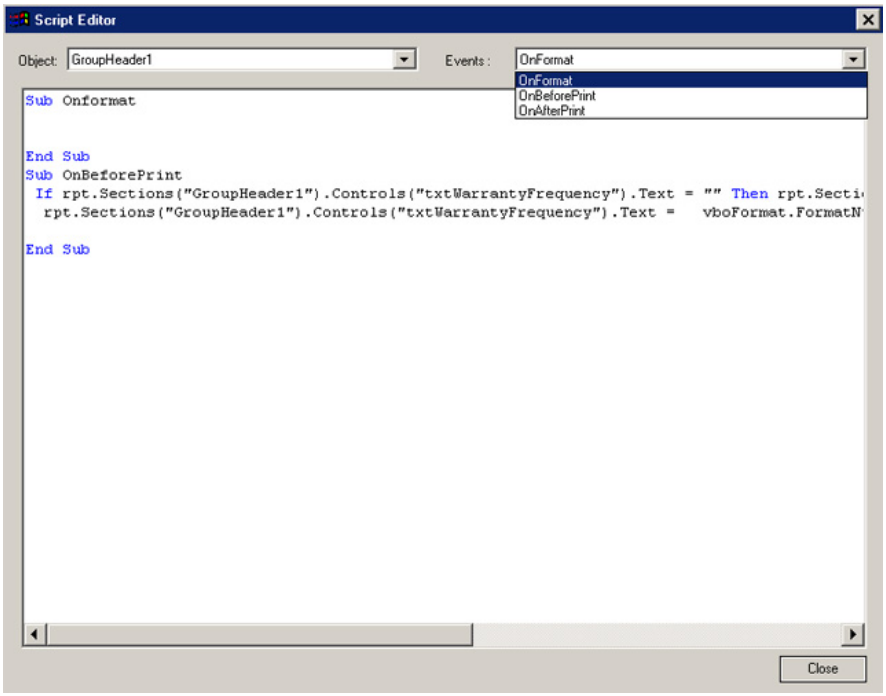
If you are proficient with VB Script, adding scripts to your report is easy. There are three report elements for which you can add a script:

- The Active Report

- A Report Section
- An Object

To add scripts to the active report:

1 Click the *View Scripts* button in the floating toolbar; this will bring up the SCRIPT EDITOR window.



Control	Description
Object	Use the drop-down menu to select a section of the report where you want to add a new script (i.e., Details). The *Object* field indicates the section of the report that you are editing for a script.
Events	Use the drop-down menu to select and add an event for the active section of the report. This will open the event's code into the main window, where you can modify the code using standard VB Script conventions.

To add scripts to a section:

1 Click on the VIEW SCRIPTS button in the format button bar. This will bring up the SCRIPT EDITOR window (see screenshot above).

Control	Description
Object	Use the drop-down menu to select a section of the report where you want to add a new script (i.e., Details).
Events	Use the drop-down menu to select and add an event for the active section of the report. This will open the event's code into the main window, where you can modify the code using standard VB Script conventions.

Note: You may invoke the EDIT SCRIPT command from any section of the Active Report. In such, you do not need to select an *Object*, you can as well add and edit a script directly.

To add scripts to objects:

1 Activate the object and the object name will be displayed in the PROPERTY TOOLBOX.

2 Enter the script in the *Tag* property value. For more information about *Tag* value syntax, see the *Dynamic Controls* section on page 72.

Working with Scripts

Although ProVIEW 4 supports Visual Basic Script conventions, all scripts must adhere to specific syntax in order to interact with the program and the report object.

Script Syntax

All scripts within the SCRIPT EDITOR (those scripts that deal with report sections, not objects on the report) must adhere to specific script syntax. For example:

```
rpt.Sections("name of section").Controls("name of control")
```

The "rpt" must be used with all calls relating back to the report. It functions in the same way as using the keyword "me" in Visual Basic. If the script references a control, a public variable, or a public property, "rpt" must be used.

Sample Script

Below is a sample script that was added to the group header section of the active report using the SCRIPT EDITOR window.

```
Sub OnFormat
 If rpt.Sections("GroupHeader4").Controls("fldCompleted").Text = "-1" Then
    rpt.Sections("GroupHeader4").Controls("fldCompleted").Text = "Yes"
 Else
    rpt.Sections("GroupHeader4").Controls("fldCompleted").Text = "No"
 End If
 If rpt.Sections("GroupHeader4").Controls("fldEmergency").Text = "-1" Then
    rpt.Sections("GroupHeader4").Controls("fldEmergency").Text = "Yes"
 Else
    rpt.Sections("GroupHeader4").Controls("fldEmergency").Text = "No"
 End If
End Sub
```

This script places values in the different controls found in the particular section by assigning text values to the *Text* property of the fields. Text and captions are assigned to controls in the various sections for display when printing. Also, some controls may need to be placed in the report as controls containing field values or a ProVIEW 4 Report Editor—assigned value that can be used as reference for calculations, but do not need to be shown in the print output. For example, to display the city and state using the standard *"City Name, and State"* as displayed on a letter, knowing that a city name can be long, you leave plenty of space for the city name to be displayed before you have the comma and the state name, for example,

Scottsdale, Arizona.

But if the city name is short, then the extra space will make the letter look odd, for example,

Mesa , Arizona.

In order to fix this, you would hide both the fields for the city and the state, and create a field labeled *CityState*. In the script for that section, you would set the text of *CityState* to be `City & ", " & State`. So the *CityState* field will show:

Scottsdale, Arizona

Mesa, Arizona

Note: There are several advance scripting features and options that go beyond the scope of this manual.

Saving Scripts

When your report is saved, any script that you have added (to the *Tag* value or through the SCRIPT EDITOR) will become part of the file. Since the code needed for the report is included in the file, the script can easily be loaded, ran, and then either displayed using the Viewer Control or exported at a later time.

Dynamic Controls

Modifying the *Tag* property is one way of making a control dynamic, such as get its value at run time. Tag scripts supersede any script created for the section that contains the control. The syntax for the Tag Property is:

```
SPECIALFIELD - Select "Name of Field to Get Value From" From "Name of Table"
```

Note: "SPECIALFIELD – " is an essential part of the syntax recognized by ProVIEW 4 Report Editor. There is a space between "SPECIALFIELD" and the "-", and another space after the "-", before the SQL statement. You can make your SQL statement as complicated as you like, but it will only return the value of the first field after the keyword "Select".

For example:

```
SPECIALFIELD – Select sg_CompName2 From tblSettings
```

The above example selects a "value (CompName2)" found in the "Settings" table; the statement does not require a filter expression. The above example returns a value of: *Division Name Here*. The report control table is included in the database and is referred to as *Settings*.

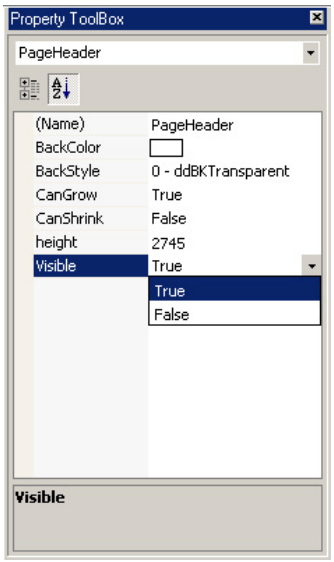
Note: By default, output format is defined in the Windows Options found in the control panel. If you wish to override these default settings with your own formatting, place Format_Override in the Tag Property, and specify our desired format in the Output Format Property in the Property Toolbox.

Hiding Controls

Hiding controls allows you to hide objects that do not need to be part of an output report. For example, you may have controls that are only used as a part of a script to calculate a total (a related scenario is described in *Adding Scripts* on page 69); thus, you would not want the objects that were part of the calculation visible. Hiding a control is also an ideal technique in testing a report's functionality—you do not need to delete the control, just hide it while you are testing the report.

To hide a report, do any of the following:

- Hide the section by setting the *Height* or *Width* value to "0" or the *Visible Property* to *"false".*
- Set the *Visible Property* of the control within a section to *"false."* This is ideal if the control is within a section that you cannot hide (for example, it has other controls on it that need to be printed).



Additional Functions and Procedures

Aside from the regular VB functions, ProVIEW 4 also comes with four specialized functions. These are global in nature—they can be used in any part of a script. These functionalities are designed to extend the capabilities of built-in functions for scripting. Also, some functions, like regional settings for date and time, work only on bounded fields.

The following function executes

```
vboSpec.GetSQLResultSet(SQLStatement,sReturnField)
```

The following function executes the [SQLStatement] and gets the value for the [sReturnField], i.e.

```
Sub OnFormat
   rpt.Sections("PageFooter").Controls("lblRepControl").Caption =
   vboSpec.GetSQLResultSet("Select ControlText From RepControl Where
   ControlID=69"," ")
End Sub
```

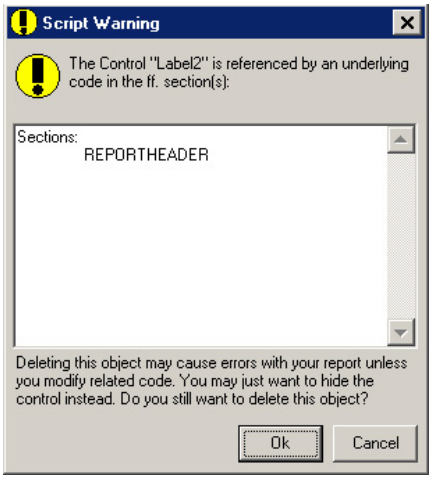
In the above sample script, the caption for the report footer is generated and assigns the value returned by the function `vboSpec.GetSQLResultSet`, after executing the SQL statement at runtime.

The following functions ensure values conform to the systems regional settings. Some built-in controls have been found to be very inconsistent in this area that necessitated the creation of the following functions:

- `vboFormat.FormatCurrencyValue(vValue)` (Function) - Returns a string expression formatted as a currency string value, formatting [vValue] using the system's regional settings.
- `vboFormat.FormatDateTimeValue(vValue)` (Function) - Returns a string expression formatted as a Date string value, formatting [vValue] using the system's regional settings.
- `vboFormat.FormatNumberValue(vValue)` (Function) - Returns a string expression formatted as a Numeric value, formatting [vValue] using the system's regional settings.

Control Errors

If you've deleted a control, a script warning dialog box will appear warning you that the selected control has an underlying code. The dialogue will also list the sections where this code can be located.


Script Warning
The Control "Label2" is referenced by an underlying code in the ff. section(s):
Sections:
REPORTHEADER
Deleting this object may cause errors with your report unless you modify related code. You may just want to hide the control instead. Do you still want to delete this object?
Ok
Cancel

Grouping Data

Data grouping is a method to organize a report containing records with common field data. The group header would contain the common field data and the details section between group headings would contain information on that common group data field. For a review on *Grouping Data*, see page 31.

Subreports

A subreport is a report within a report. Subreports are separate reports (created individually) that are embedded into the main report. Subreports can be used in as many reports as you want and because they are separate reports, changes and updates are automatically reflected in reports from which subreports are embedded. For extensive information on building subreports, See *Chapter 5: Editing Subreports* on page 59.

Chapter 8: Maintaining Reports

Report Editor includes several built-in features, which allow you to maintain, share, and store your reports. These include:

- Saving reports
- Restoring reports

Import/export reports

- Data Transfer Utility

Saving Reports

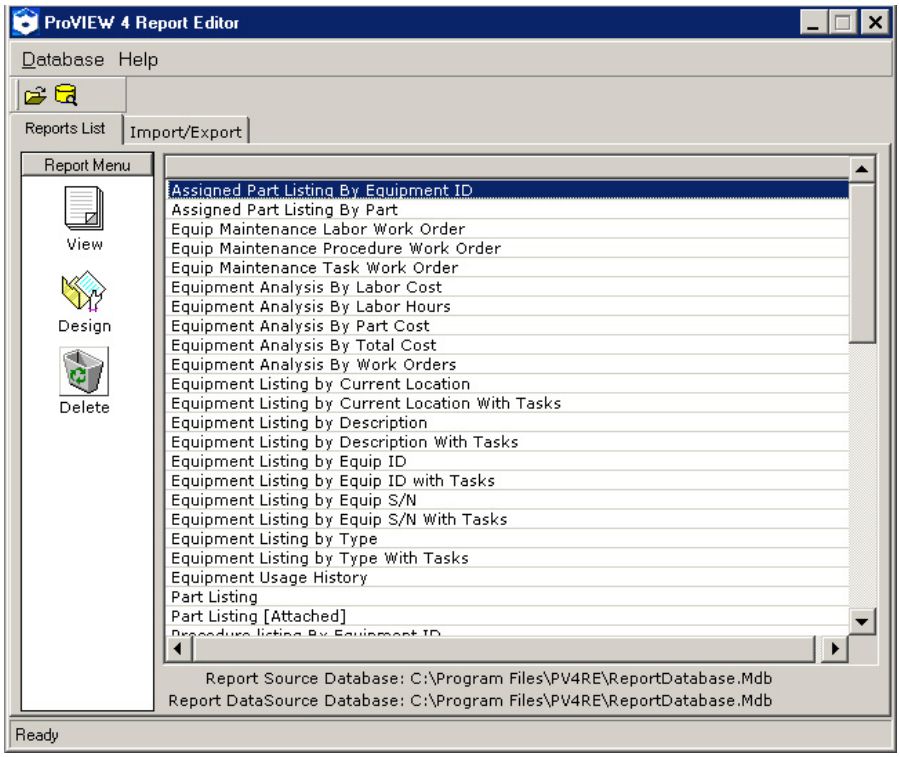
As discussed earlier on, Report Editor has two types of save functions: *Save* and *Save As*. The *Save* function is used for saving reports for the first time, and saving updates to reports. The *Save As* function, on the other hand, is used for saving a new report based on a report template, and saving a copy of an existing report using a different file name. See *Saving Reports* on page 57.

Deleting Reports

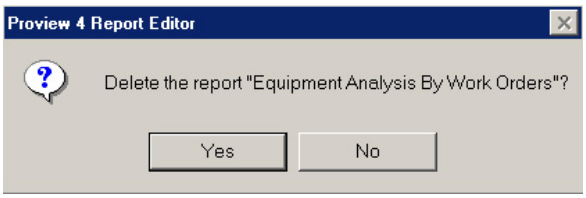
To maintain an orderly report database, it is necessary to delete unnecessary reports.

To delete a report:

1 Access the REPORTS window.


ProVIEW 4 Report Editor
Database Help
Reports List
Import/Export
Report Menu
View
Design
Delete
Assigned Part Listing By Equipment ID
Assigned Part Listing By Part
Equip Maintenance Labor Work Order
Equip Maintenance Procedure Work Order
Equip Maintenance Task Work Order
Equipment Analysis By Labor Cost
Equipment Analysis By Labor Hours
Equipment Analysis By Part Cost
Equipment Analysis By Total Cost
Equipment Analysis By Work Orders
Equipment Listing by Current Location
Equipment Listing by Current Location With Tasks
Equipment Listing by Description
Equipment Listing by Description With Tasks
Equipment Listing by Equip ID
Equipment Listing by Equip ID with Tasks
Equipment Listing by Equip S/N
Equipment Listing by Equip S/N With Tasks
Equipment Listing by Type
Equipment Listing by Type With Tasks
Equipment Usage History
Part Listing
Part Listing [Attached]
Report Source Database: C:\Program Files\PV4RE\ReportDatabase.Mdb
Report DataSource Database: C:\Program Files\PV4RE\ReportDatabase.Mdb
Ready

2 Select the report/s that you want to delete from the list of available reports, and click the *Delete* button. You will then be prompted to confirm your action.



3 Select *Yes* button to continue action, or *No* to cancel. This action cannot be undone.

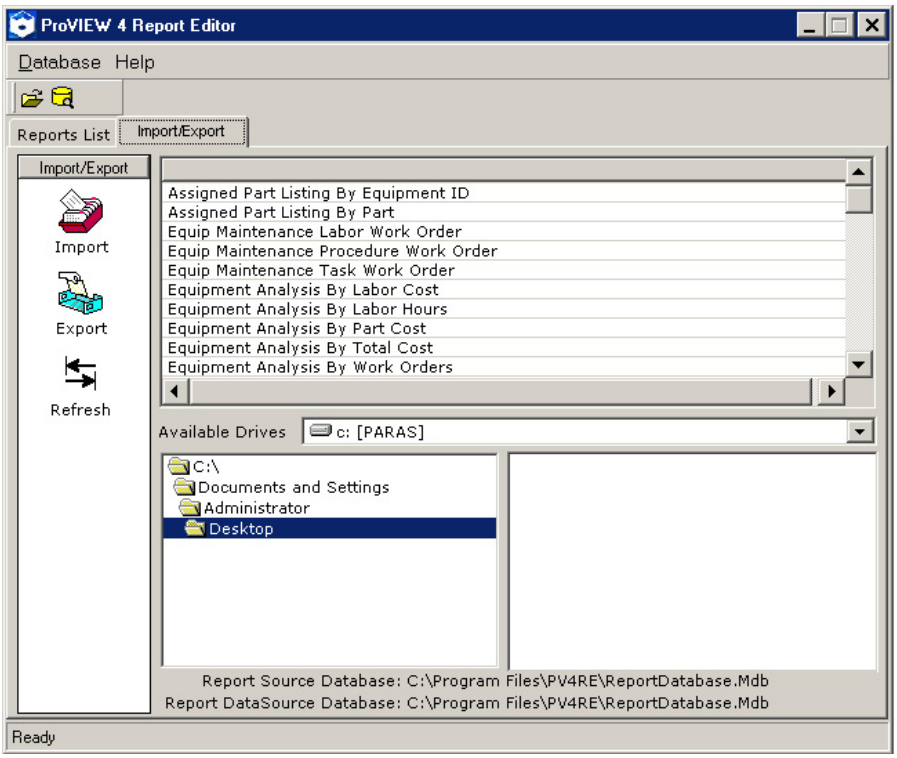
Importing and Exporting Reports

Sharing custom reports is beneficial in standardizing your organization's operating and information reporting procedures. Report Editor allows you to easily share (import and export) custom reports by encrypting report files in a proprietary .RPT format.

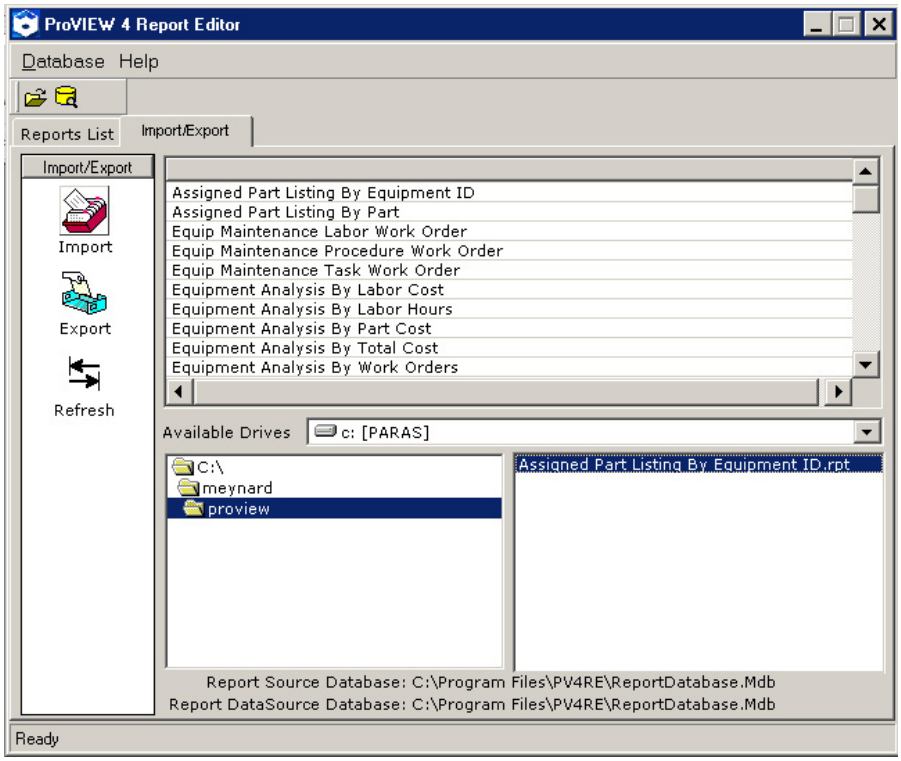
Importing Reports

To import a file or report:

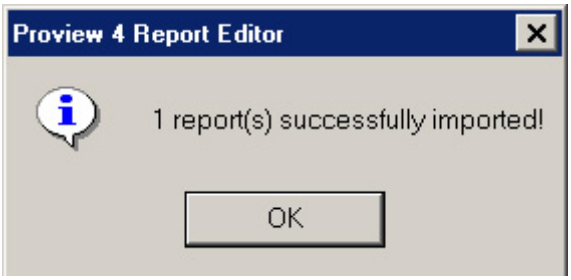
1 Select the *Import/Export* tab in the REPORT EDITOR window.



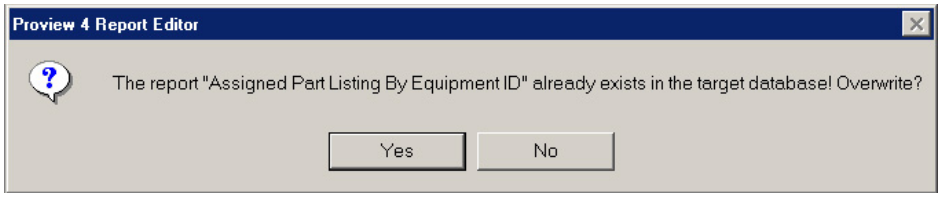
2 Locate (by mapping the directory and specifying) the folder from where the report(s) that you wish to import are currently located.



3 Click the *Import* button. A dialogue box will inform you of the success of the action.



4 If a report that you are trying to import already exist in ProVIEW 4, you will be asked whether you want the program to overwrite the existing database or not. Select *Yes* to overwrite; *No* to cancel.


Proview 4 Report Editor
The report "Assigned Part Listing By Equipment ID" already exists in the target database! Overwrite?
Yes
No

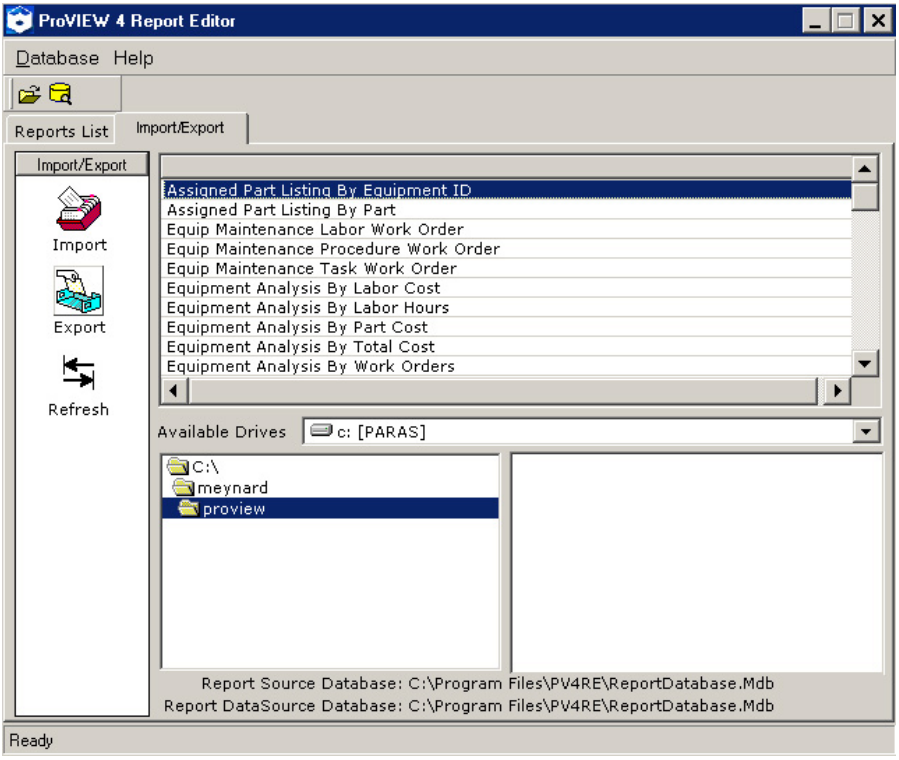
Note: Reports imported into the database need to have an .RPT file extension or they will not be recognized by the database.

Exporting Reports

To export reports:

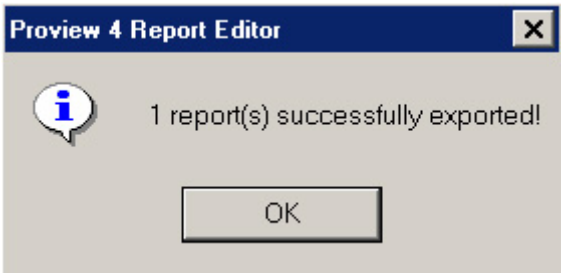
1 Select the Import/Export tab in the REPORT EDITOR window.

2 From the list, highlight the report you want to export (you may select more than one report).



3 In the Available Drives field, identify the location to which the report will be exported.

4 Click the EXPORT button. A dialogue box will inform of the success of the action



Note: Reports with subreport(s) that are being exported will export both the main report and the linked subreport(s).

Remember, reports exported onto your hard drive need to have an .RPT file extension or the importing process will not recognize them.

Data Transfer Utility (DTU)

Periodically, new reports are added to ProVIEW 4 Report Editor, and/or enhancements may have been done to existing report(s). In the event that a new version of ProVIEW is released, it is recommended that you run the DTU in order to access the most recent reports.

When an update is applied, updated files replace the original files that are currently installed in the program. In order to keep your data safe from upgrade "overwrites," updates ignore the target database so your essential information is not overwritten or affected. This includes custom reports you have created and stored in the target database.

To update ProVIEW:

1 Run the DATA TRANSFER UTILITY found in the Windows ProVIEW 4 program group found in START > PROGRAMS > DATA TRANSFER UTILITY. This will open the REPORT DATA TRANSFER UTILITY window.

2 Click the *Browse* button; the OPEN DATABASE window appears:

Locate the database in the directory. Indicate the filename of the desired database in the *File Name* field. Click the *Open* button afterwards; the window disappears, and you will be reverted to the REPORT DATA TRANSFER UTILITY window.

3 Import the reports that you want to be updated or added in ProVIEW. For a review on how to import reports, see *Importing Reports* on page 76.

Appendix A: Object/Control Properties Definitions

(Name) – Name of control.

Applies to: Report Header/Footer, Page Header/Footer, Group Header/Footers, Subreports, Labels, and Data Fields

Alignment

Applies to: Data Fields, Labels, and Checkboxes

- Labels, Fields and Checkbox - Alignment property determines where the caption should be printed relative to the left, center and right edges of the label area.

Data Type - TextAlignment

Controls

Value	Mnemonic	Description
0	ddTXLeft	Aligns the text to the left side of the object area.
1	ddTXRight	Aligns the text to the right side of the object area.
2	ddTXCenter	Center the text horizontally within the object area.

AllowSplitters – Sets/returns whether to allow splitting of data across pages.

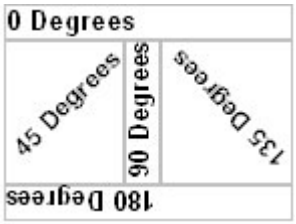
Applies To: Active Report

Data Type - Boolean

Angle – Angle property sets or returns the angle (slope) of the printed value (1 = 1/10 degree).

Applies To: Label

Data Type - Integer



BackColor – Sets or returns the background color of a section. The setting will be reflected when the BackStyle property is set to ddBKNormal.

Applies To: Report Header/Footer, Page Header/Footer, Group Header/Footer, Details, Label, Data Field, and Checkbox

Data Type - OLE_COLOR

BackStyle – Sets or returns whether the section has a transparent or normal background.

Applies To: Report Header/Footer, Page Header/Footer, Group Header/Footer, Details, Label, Data Field, and Checkbox

Data Type - BackStyle

Controls

Value	Mnemonic	Description
0	DdBKTransparent	Transparent opaque background, the objects behind the object show through the object.
1	DdBKNormal	Normal, the object hides all controls behind it.

Caption – Defines the label text.

Applies To: Labels, and Checkbox

- Checkbox and DDTools - Sets or returns caption string of the tool, command button or checkbox.
- Labels - Sets or returns the text string to be printed.

Data Type - String

CaptionPosition – Sets/Returns caption position on bar code.

Applies To: Bar Code

Data Type – Integer

Controls

Value	Mnemonic	Description
0	DdbcCaptionNone	No bar code caption.
1	DdbcCaptionAbove	The caption for the bar code will be above the bar code.
2	DdbcCaptionBelow	The caption for the bar code will be below the bar code.

CanGrow – Determines whether the section height will be expanded if any of its contained controls grows beyond its area. If this property is set to False, the section contents will be clipped to the height of the section.

Applies To: Page Header/Footer, Group Header/Footer, Detail, Subreports, and Data Fields

Data Type – Boolean

CanShrink – Determines whether the section height will be adjusted to fit its contents. When this property is set to False, the section will not shrink beyond the minimum value defined by its Height property.

Applies To: Page Header/Footer, Group Header/Footer, Detail, Subreports, and Data Fields

Data Type – Boolean

- Fields - This property determines whether Report Editor should decrease the height of the control based on the value of the field. When set to False, the field will take the exact area defined by its preset coordinates. When set to True, Report Editor will decrease the height of the field to exactly fit the contents and shift the control below it upward to account for the decrease in height.

ClassName – Sets/returns CSS class name from style sheet.

Applies To: Label, Data Field, and Checkbox

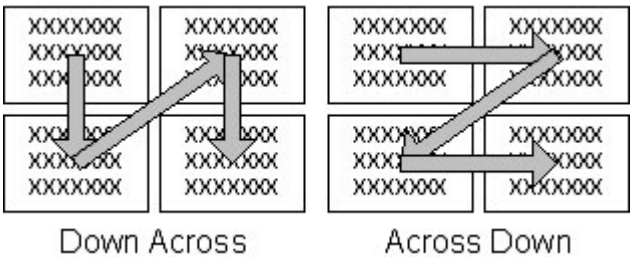
Data Type - String

ColumnCount - This property sets or returns the number of newspaper columns in the report. This property can be used to print labels or phonebook style listings. The width of each column equals the PrintWidth of the report divided by the number of columns. ColumnCount applies to Detail sections only. You can use the ColumnLayout property to force associated group headers and footers to follow the same column format as their detail section.

Applies To: Detail

Data Type - Integer

ColumnDirection - This property determines how Report Editor should print the detail section in a multi-column report.



Applies To: Detail

Data Type - ColumnDirections

Controls

Value	Mnemonic	Description
0	ddCDDownAcross	Print each section down each column followed by the next column to its right.
1	ddCDAcrossDown	Print sections right across the first row followed by the second row and so on.

ColumnLayout – Sets/returns whether header/footer sections are printed inside the columns.

Applies To: Group Header/Footer

ColumnSpacing – Sets/returns space between columns in multi-column report.

Data Type - Integer

Data Field

- Field - Data Field defines the source of data for the control. When the Data Source and Data Field properties are set to a valid field name in the data source, Report Editor binds the field's data from each record. Then it loads the field value into the DataValue property and formats it into the Text property based on the OutputFormat property. Then it fires a Format event for the section.

Data Type – String

- Section - Data Field applies to GroupHeader sections; it defines the binding field for a group within the detail body. This value is set to the name of any field in the Data Source or the name of a custom field added into the Fields collection. When this property is set, Report Editor will create a new group each time the value of the bound field changes in the detail data records.

NOTE: *REPORT EDITOR WILL NOT SORT THE DATA AUTOMATICALLY. THE DATA SOURCE SHOULD BE SORTED TO REFLECT THE DESIRED GROUPING OF DETAIL RECORDS.*

Applies to: Group Header, Subreport, Data Field, and Checkbox

Data Type - String

DocumentName – Sets/returns the document name of the report. The document name string appears in the print spooler to identify the printing report.

Applies To: ActiveReport

Data Type - String

EnableCheckSum – Sets/returns if checksum is used when bar code is rendered.

Applies To: Bar Code

Font – To format the text of a label or a field control, click on the Ellipse button (…) of the Font property in Visual Basic's property window. You can set the typeface name, size and other font settings from the standard Font dialog box.

In addition, you can use the Format toolbar button and combo-boxes to set those properties for any selected control or controls.

Apples To: Label, Data Field, and Checkbox

Data Type - StdFont

ForeColor – Sets/returns the foreground color used by the canvas drawing methods.

Apples To: Label, Data Field, and Checkbox

Data Type - OLE_COLOR

Height – Sets/returns the height of the section in twips.

Applies To: Page Header/Footer, Group Header/Footer, Details, Subreport, Label, Data Field, and Checkbox

Data Type - Single

HyperLink – Identifies the hyperlink text of the clicked field.

Applies To: Label, and Data Field

Data Type - string

KeepTogether -Determines whether a section should print in its entirety on the same page. When you set this property to True, the section will print on the same page without any page breaks. A False setting allows the section to be split across two or more pages.

Applies To: Group Header/Footer, Detail

Data Type - Boolean

Left – Sets/returns the space between the left edge of the physical page and the left edge of the control/object.

Applies To: Subreports, Label, Data Field, and Checkbox

Data Type - Single

Default Value - 1440 twips = 1 inch.

MaxPages – Sets/returns the maximum number of pages to be processed by Report Editor. Report Editor will stop once the number of pages reaches this value.

You can use this value to limit the number of output pages when running reports and distributing the results over a slow connection.

Applies To: ActiveReport

Data Type - Long

MultiLine – Determines whether the RichEdit prints multiple lines or single line. When set to False the control is limited to single lines.

Applies To: Label, and Data Field

Data Type - Boolean

NewColumn - Determines whether Report Editor should insert a column-break before and/or after printing the section.

Applies To: Group Header/Footer, and Detail

Data Type - NewPageConstants

Controls

Value	Mnemonic	Description
0	DdNPNone	No page-break before the section.
1	ddNPBefore	Start printing the section on a new page.
2	DdNPAfter	Start a new page after printing the section.
3	ddNPBeforeAfter	Start printing the section on a new page and start a new page after printing it.

NewPage – Determines whether Report Editor should insert a page-break before and/or after printing the section.

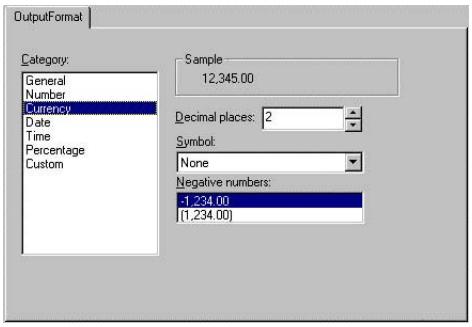
Applies To: Group Header/Footer, and Detail

Data Type – NewPageConstants

Controls

Value	Mnemonic	Description
0	DdNPNone	No page-break before the section.
1	ddNPBefore	Start printing the section on a new page.
2	DdNPAfter	Start a new page after printing the section.
3	DdNPBeforeAfter	Start printing the section on a new page and start a new page after printing it.

OutputFormat – **ProGAGE ISO Report Editor** provides an easy to use Number Format dialog box. You can use this dialog to set the OutputFormat property of field controls to a valid formatting mask.



To access this dialog, click on the ellipse (…) button of the OutputFormat property in Visual Basic's property window.

Applies To: Data Field

Note: Currency format is determined by the language set in the system Control Panel | Regional Options settings in your systems. Depending on the language and the format placed in the OnFormat property in the Property Toolbox the system will place that currency symbol in the defined format on the report at run-time, i.e. OnFormat = $#,##0.00.

PrintAtBottom – Sets/returns if group footer section is moved to bottom of page.

Applies To: Group Footer

Data Type - Boolean

PrintWidth – Sets/returns the width of the report page in twips (1440 twips = 1 inch).

Applies To: ActiveReport

Data Type - Single

Default Value - 1440 twips = 1 inch.

ReportName – Sets/returns the name of the linked report object.

Applies To: Subreports

Data Type - String

Style – Sets/returns style string of object.

Applies To: Data Fields, and Checkbox

Data Type - string

SummaryDistinctField – Sets/returns the name of the field used in a distinct summary function. The summary function will process Data Field values based on the distinct value of this field.

NOTE: *THIS PROPERTY IS USED ONLY WHEN THE SUMMARYFUNC VALUE IS ONE OF DISTINCT SUMMARY FUNCTIONS.*

Applies To: Data Field

Data Type - String

SummaryFunc - Sets the type of the summary function used to process the Data Field values. You can use this function to create sub totals, grand totals and other summary values.

Data Type - SummaryFunctions

Controls

Value	Mnemonic	Description
0	DdSFSum	Calculates the total of all values within the specified summary region (group, page report).
1	DdSFAvg	Calculates the average of all values within the specified summary region (group, page or report).
2	DdSFCount	Calculates the count of all values within the specified summary region (group, page or report).
3	DdSFMin	Calculates the minimum of all values within the specified summary region (group, page or report).
4	DdSFMax	Calculates the maximum of all values within the specified summary region (group, page or report).
5	DdSFVar	Calculates the variance of all values within the specified summary region (group, page or report).
6	DdSFVarP	Calculates the population variance of all values within the specified summary region (group, page or report).
7	DdSFStdDev	Calculates the standard deviation of all values within the specified summary region (group, page or report).
8	DdSFStdDevP	Calculates the population standard deviation of all values within the specified summary region (group, page or report).
9	DdSFDSum	Calculates the total based on the distinct values of another field within the specified summary region (group, page or report).
10	DdSFDAvg	Calculates the average based on the distinct values of another field within the specified summary region (group, page or report).
11	DdSFDCount	Calculates the distinct count based on the distinct values of another field within the specified summary region (group, page or report).
12	DdSFDVar	Calculates the variance based on the distinct values of another field within the specified summary region (group, page or report).
13	DdSFDVarP	Calculates the population distinct variance based on the distinct values of another field within the specified summary region (group, page or report).
14	ddSFDStdDev	Calculates the standard deviation based on the distinct values of another field within the specified summary region (group, page or report).
15	ddSFDStdDevP	Calculates the population standard deviation based on the distinct values of another field within the specified summary region (group, page or report).

SummaryGroup – This property sets or returns the name of the group header section that will reset the summarized field value. For example, setting a sum of price for an order group header will reset the sum to zero for each order group. This property is valid when the SummaryType is set to 3-SubTotal.

NOTE: *YOU MUST SELECT SUMMARYRUNNING | DDSRGROUP IF YOU USE SUMMARY GROUP.*

Applies To: Data Field

Data Type - String

SummaryRunning – This determines whether the summarized will be accumulated or reset for each level (detail, group or page). Setting this property ddSRGroup or ddSRAll will make Report Editor print a running summary of the field at the group or report level.

NOTE: *YOU MUST SELECT A SUMMARYGROUP IF DDSRGROUP IS USED.*

Applies To: Data Field

Data Type - SummaryRunningType

Settings

Value	Mnemonic	Description
0	DdSRNone	Do not calculate a running summary.
1	DdSRGroup	Calculates a running summary (each value is the sum of the current value and all preceding values) within the same group level.
2	DdSRAll	Calculates a running summary for all values.

SummaryType – SummaryType determines the type of summarization on the field if any. Report Editor can summarize the field as a:

1. Sub total (group level; reset for each group)
2. Grand total (report level; do not reset until all records are processed)
3. Page total (page level; reset for each page)
4. Or a page count, which is the total number of pages printed.

Note: If the summarized field is placed ahead of it summary level (for example, placing a page total in the page header or a report grand total in the report header); the containing section and the following sections will not be printed until the summary value is resolved –calculated.

Applies To: Data Field

Data Type - SummaryType

Controls

Value	Mnemonic	Description
0	ddSMNone	No summarization.
1	ddSMGrandTotal	Specifies a report level summary, evaluates the summary function for all records in the report.
2	ddSMPageTotal	Specifies a page level summary, evaluates the summary function for all records on each page.
3	ddSMSubTotal	Specifies a group level summary, evaluates the summary function for all records in each group level.
4	ddSMPageCount	Specifies a Page Count field.

Text – Sets/returns the text string to be printed.

Applies To: Data Field

Data Type - String

Tag – Sets/returns a user-defined value associated with the canvas object. You can use this property to store information about the page that you might want to retrieve later from the Pages collection.

Applies To: Data Field, and Checkbox

Data Type – Variant

Note: Label tags are better left unchanged. They are set to "BUDDY@CONTROL FIELD:field name". This is the "link" designed into the program to make sure Labels are properly associated with data fields. This is very important because Labels—and not fields--are used in creating the report filter. Field labels can be changed but not field names (Field names are changed by editing data table).

TOCEnabled – Enables/disables the table of contents tree.

Applies To: ActiveReport

Data Type - Boolean

TOCVisible - Determines whether the viewer's toolbar is displayed in the viewer window.

Applies To: ActiveReport

Data Type - Boolean

ToolbarVisible - Determines whether the toolbar is displayed in the preview window.

Applies To: ActiveReport

Data Type - Boolean

Top – Sets/returns the space between the top edge of the physical page and the top edge of the control/object.

Applies To: ActiveReport

Data Type - Single

Default Value - 1440 twips = 1 inch.

UnderlayNext – Determines whether the section should print underneath the following section. The following section will start printing starting from the top the top coordinate of the under-laid section instead of the bottom coordinate.

Applies To: Group Headers

Data Type – Boolean

UserData – General purpose property. It is useful when custom information is needed in a report that can be manipulated at run-time.

Applies To: ActiveReport

Value – Sets/returns a value of true/false.

Applies To: Checkbox

VerticalAlignment – Sets/returns the vertical position of the text relative to the containing area.

Applies To: Data Field

Data Type - Integer

Controls

Value	Mnemonic	Description
0	ddTXTop	Aligns the text to the top of the object area.
1	ddTXMiddle	Centers the text vertically within the object area.
2	ddTXBottom	Aligns the text to the bottom of the object area.

Visible – Determines if the control/object is visible or printable.

Applies To: Page Header/Footer, Group Header/Footer, Detail, Subreport, Data Field, and Checkbox

Data Type - Boolean

Watermark – Select an image to be used as watermark or background image for your canvas. This can be viewed in preview mode.

Applies To: ActiveReport

Data Type - Image

WatermarkAlignment - Sets/returns the watermark alignment on the printed page.

Applies To: ActiveReport

Data Type - watermarkalignment

Settings

Value	Mnemonic	Description
0	ddPATopLeft	Aligns to top left of margins
1	ddPATopRight	Aligns to top right of margins

Value	Mnemonic	Description
2	ddPACenter	Aligns to the center of the page
3	ddPAButtomLeft	Aligns image to bottom left hand side of page
4	ddPAButtomRight	Aligns image to bottom right hand side of page

WatermarkPrintOnPages – lets specific pages you want the watermark image on (set via the watermark property). The syntax can include a single page, page range or a combination of both, i.e. 1, 5-8, 9, 10-12. The watermark is an image loaded to the report's background, which can be positioned, sized or aligned. You set the watermark on script by loading an image via LoadPicture (e.g., rpt.WaterMark = LoadPicture(App.Path & "\WaterMark.jpg")).

Applies To: ActiveReport

WatermarkSizeMode - Sets/returns the way the watermark will display on the printed page.

Applies To: ActiveReport

Data Type - watermarksizemode

Settings

Value	Mnemonic	Description
0	DdSMClip	This will clip an image if it is larger that print area
1	ddSMStretch	This will stretch an image to fit the print area
2	DdSMZoom	This will zoom in or out of the image to let the image occupy the whole print area.

Width – Sets/returns the space between the left and right edges of the control/object.

Applies To: Subreport, Data Field, and Checkbox

Data Type - Single

Default Value - 1440 twips = 1 inch.

WordWrap – Sets/returns word wrapping for control. Set to True to wrap the text to fit within the bounds of the specified coordinates. Set to false and text will be clipped if **CanGrow** is set to false and control will show only one line of text.

Applies To: Data Field

Appendix B: References

VBScript Resources

There are many resources available on the web and at local bookstores to help learn VBScript. Some essential resources include:

- Microsoft's Web Site: The definitive reference on VBScript straight from the originators of the language. Visit the home page of Microsoft Scripting at http://msdn.microsoft.com/scripting/.
- For VBScript documentation, tutorials, language references, and to download VBScript manuals, visit http://msdn.microsoft.com/scripting/vbscript/techinfo/vbsdocs.htm.
- Connect to the VBScript newsgroup at Microsoft.Public.Scripting. VBScript. It is a forum where thousands of VBScript developers congregate to ask questions and exchange ideas.
- VBScript related websites such as http://www.visualbasicscript.com/ and http://www.w3schools.com/vbscript/.

VBScript Related Books

VBScript Master's Handbook: Master's Handbook
by Christopher J. Goddard, Mark White, and Chris Goddard
Software: 669 pages; **Dimensions (in inches):** 2.00 x 9.25 x 7.50
Publisher: Premier Press; Book and CD-ROM edition (October 1996)
ISBN: 0761507698

Learning VBScript
by Paul Lomax
Paperback: 640 pages; **Dimensions (in inches):** 1.20 x 9.17 x 7.04
Publisher: O'Reilly & Associates; Book and CD-ROM edition (July 1997)
ISBN: 1565922476

Learn Microsoft Visual Basic Scripting Edition Now
by Gary Cornell, and Gary Cornell
Publisher: Microsoft Press; Book and CD-ROM edition (January 1998)
ASIN: 1572313471

Inside Microsoft Visual Basic: Scripting Edition (Microsoft Programming Series)
by Scot Hillier, Inc. New Technology Solutions (Editor), and Scott Hillier
Publisher: Microsoft Press; Book and CD-ROM edition (November 1996)
ASIN: 1572314443

Teach Yourself VBScript in 21 Days
by Keith Brophy, and Timothy Koets
Publisher: Sams Publishing; Book and CD-ROM edition (July 1, 1996)
ASIN: 1575211203

VBScript Programmer's Reference
by Adrian Kingsley-Hughes, Kathie Kingsley-Hughes, Paul Wilton, Brian Francis, Brian Matsik, Erick Nelson, Piotr Prussak, Dan Read, Carsten Thomsen, Stuart Updegrave, Antonio De Donatis, and Susanne Clark
Publisher: Wrox Press Inc; 1st edition (December 1999)
ISBN: 1861002718

Vbscript in a Nutshell: A Desktop Quick Reference
by Paul Lomax, Matt Childs, and Ron Petrusha
Publisher: O'Reilly & Associates; (May 2000)
ISBN: 1565927206

VBScript Pocket Reference
by Matt Childs, Ron Petrusha, and Paul Lomax
Publisher: O'Reilly & Associates; (January 2001)
ISBN: 0596001266

SQL Related Books

SQL Fundamentals (2nd Edition)
by John J. Patrick
Publisher: Prentice Hall PTR; 2nd Book and CD-ROM edition (May 7, 2002)
ISBN: 0130669474

SQL: The Complete Reference, Second Edition
by James R. Groff, Paul N. Weinberg, and Lyssa Wald (Illustrator)
Publisher: McGraw-Hill Osborne Media; 2nd Book and CD-ROM edition (August 15, 2002)
ISBN: 0072225599

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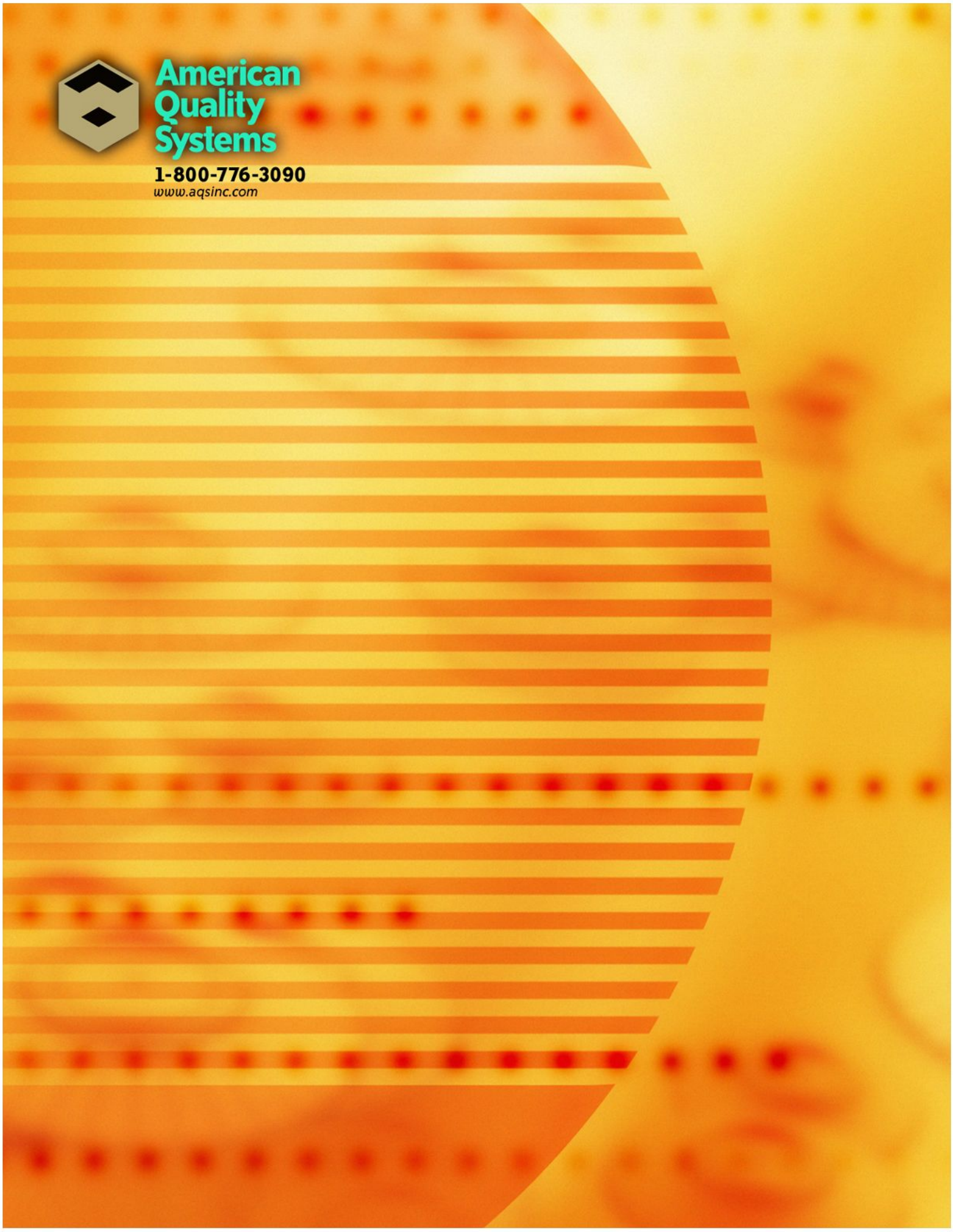
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Systems
1-800-776-3090
www.aqsinc.com